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IN-SERVICE NEEDS OF SECONDARY SCHOOL TEACHERS IN ABA, IMO STATE, NIGERIA: A STUDY OF TEACHERS' AND ADMINISTRATORS' PERCEPTIONS AND PREFERENCES

by

© CHIEMELA NWA IKONNE

A THESIS

SUBMITTED TO THE FACULTY OF GRADUATE STUDIES AND RESEARCH
IN PARTIAL FULFILMENT OF THE REQUIREMENTS FOR THE
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ABSTRACT

This study was designed to examine the differences between teachers' and administrators' perceptions of the nature and extent of the in-service needs of teachers in Aba school system, Imo State, Nigeria. Also, differences between teachers' and administrators' preferences regarding the ways and means of meeting the needs were examined.

The data for the study were collected by means of two questionnaires (one for teachers, the other for administrators) and a semi-structured interview. The questionnaires were distributed to 251 teachers and 18 principals in 18 schools that were selected through stratified random sampling, and to 3 zonal office staff. The returns were about 80 percent from teachers and 100 percent from administrators. Twenty one teachers and 7 administrators who were willing to be interviewed were interviewed for the study. The questionnaire data were analysed primarily by the use of one-way analysis of variance and t-tests. The interview data were analysed according to their contents.

Substantial differences existed between teachers' and administrators' perceptions of the in-service needs of teachers. In contrast, there was little difference between teachers' and administrators' preferences on the ways and means of meeting the needs.

The findings suggest that there is the need for in-service education designed to help the teachers overcome the difficulties which they have in performing certain tasks, especially those that are related to curriculum and instruction.

Among other things, the respondents indicated that the State Ministry of Education should be primarily responsible for financing, planning and organising teachers' in-service programmes. They also indicated that the best incentive for teachers to participate in in-service activities is to offer them in-service courses that lead to higher qualification or promotion.

Implications for planning and organising in-service teacher education programmes are discussed. Implications for future research in the area of in-service education of teachers are also discussed.

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CHAPTER 1

INTRODUCTION AND STATEMENT OF THE PROBLEM

For the past two decades there has been a great emphasis on in-service education of teachers throughout the world. This emphasis seems to be prompted by two main factors. First, in-service education is seen by many educators as an effective means of eliminating deficiencies in the preservice education of teachers (McKague, 1975:52; Tyler, 1978:43; and Harris, 1980:13). Second, many educators believe that in-service education has the potential to help teachers maintain or advance their professional competence (Altmann et al., 1979:38, Champagne, 1980:401; Wood et al., 1981:59 and Morant, 1981:4). Parallel to these views are the findings of many research studies (Joyce and Showers, 1980:381; Joyce, 1981:117; and Champagne, 1980) which indicate that in-service education can, in fact, help teachers to develop, maintain or advance their professional competence.

The general endorsement of in-service education as one of the most promising and powerful means of improving education (Fullan, 1982:274) has led many schools and school systems to establish in-service programmes to meet teachers' professional needs. However, while some of these programmes have been beneficial to teachers, "the majority of them have been less than successful" (Fullan, 1982:274).

A survey of the literature reveals that the most frequently cited reason for the failure of many teacher in-service programmes is that in-service needs and activities are often determined by persons other than the teachers. According to Cooper and Hunt (1978:62) one of the major problems facing in-service training is that "Teachers are seldom involved in planning in-service or assessing their needs." Edelfelt (1974:250) notes that many in-service programmes have failed to meet teachers' needs because they have been required by superordinates without consultation with teachers. Similarly, Pilcher (1973:340) believes that most of the doubts and problems surrounding in-service programmes could be overcome if teachers are allowed to define their own educational problems and delineate their own needs.

The issue of who determines teachers' in-service needs has also been discussed by Sharma (1982), Lieberman and Miller (1979), and Williamson and Elfman (1982). For Sharma (1982:403), many teachers find in-service activities not rewarding because the organisers assume that "teachers have too narrow a perspective and that teachers' opinions are not valid" and, as a result, often select activities they feel will be helpful to teachers, with no regard to teachers' needs. Williamson and Elfman (1982:40) argue that many staff development programmes have not been useful because teachers have not been "actively involved in determing their own in-service needs from the very beginning." Lieberman and Miller (1979:73) also contend that some in-service projects have failed because the organisers "were insufficiently aware of the needs and practices of particular schools and teachers." A similar veiw is held by Tye and Tye (1984:321) who observe that school administrators tend to mandate changes without creating conditions that would overcome teachers' isolation. Further, they argue that proposed educational reforms will fail as long as teachers are not allowed to "choose for themselves the projects through which they will participate in improving their schools."

In fact, Enns (1968:288) had earlier remarked that in-service education is possibly one of the great spectator sports of our time, for:

> ... often in-service programmes are designed and worked out by people other than teachers, on the perceptions these people have of what teachers need.

From a review of in-service education practices in Canada, Fullan (1979:3) identified seven major causes of failure of in-service programmes. At least three of the causes relate to the question of who defines teachers' in-service needs, namely:

1. Topics are frequently selected by people other than those for whom the in-service is intended.
2. In-service programmes rarely address the individual needs and concerns.
3. The majority of programmes involve teachers from many different schools and / or school districts, but there is no recognition of the differential impact of positive and negative factors within the system to which they must return.

Certainly, it is a widely held view that many in-service programmes fail because in-service needs and activities are frequently determined and organised by teacher leaders with little or no input from teachers. Implicit in this view, however, is that administrators and teachers have different perceptions of what teachers' in-service needs and preferences are.

THE CONTEXT OF THE STUDY

Nigeria has been experiencing enormous educational expansion since 1976 when a universal primary education (UPE) programme was introduced throughout the nation. This educational expansion was prompted by the perceived need to prepare more Nigerians for greater economic, political and social development. The Nigerian government has continued to stress the gravity as well as the urgency of this need through its policy statements on education which include the following:

> 1. Education is a very powerful instrument for social change in a process of dynamic nation building ... the federal government is committed to creating in the country an educational system capable of ensuring that every citizen is given full equal opportunity to develop his intellectual and working capabilities both for his own good and for the good of the nation.
>
> 2. Not only is education the greatest force that can be used to bring about redress, it is also the greatest investment a nation can make for quick development of its economic, political, sociological and human resource (Obe, 1984:977).

Satisfying the need for qualified manpower, requires, among other things, an effective system for the pre-service and in-service preparation of teachers.

Aba Secondary School System, Imo State, Nigeria

This study of in-service education needs of teachers was conducted in Aba secondary school system, Imo State, Nigeria (see maps 1 and 2 for geographical location). Imo State has the second highest enrolment (about 220,000)[1] in secondary education and, as a result, the second largest number of secondary school teachers (about 5,500) in Nigeria. Aba school system is one of five secondary school systems in Imo State. It has an enrolment of about 52,000 and about 1,100 teachers.

Educational Preparation of Teachers and Administrators

There are 73 secondary schools in Aba school system. Teachers in this school system, like other secondary teachers in Nigeria, have various educational background and qualifications which include, in ascending order: (1) Grade II Teacher's Certificate (obtained after a successful completion of 2 years of teacher education); (2) Higher School Certificate (obtained after a successful completion of 2 years of undergraduate study); (3) National Certificate of Education (obtained after a successful completion of 3 years of advanced teacher training); or (4) a baccalaureate in Arts, Education

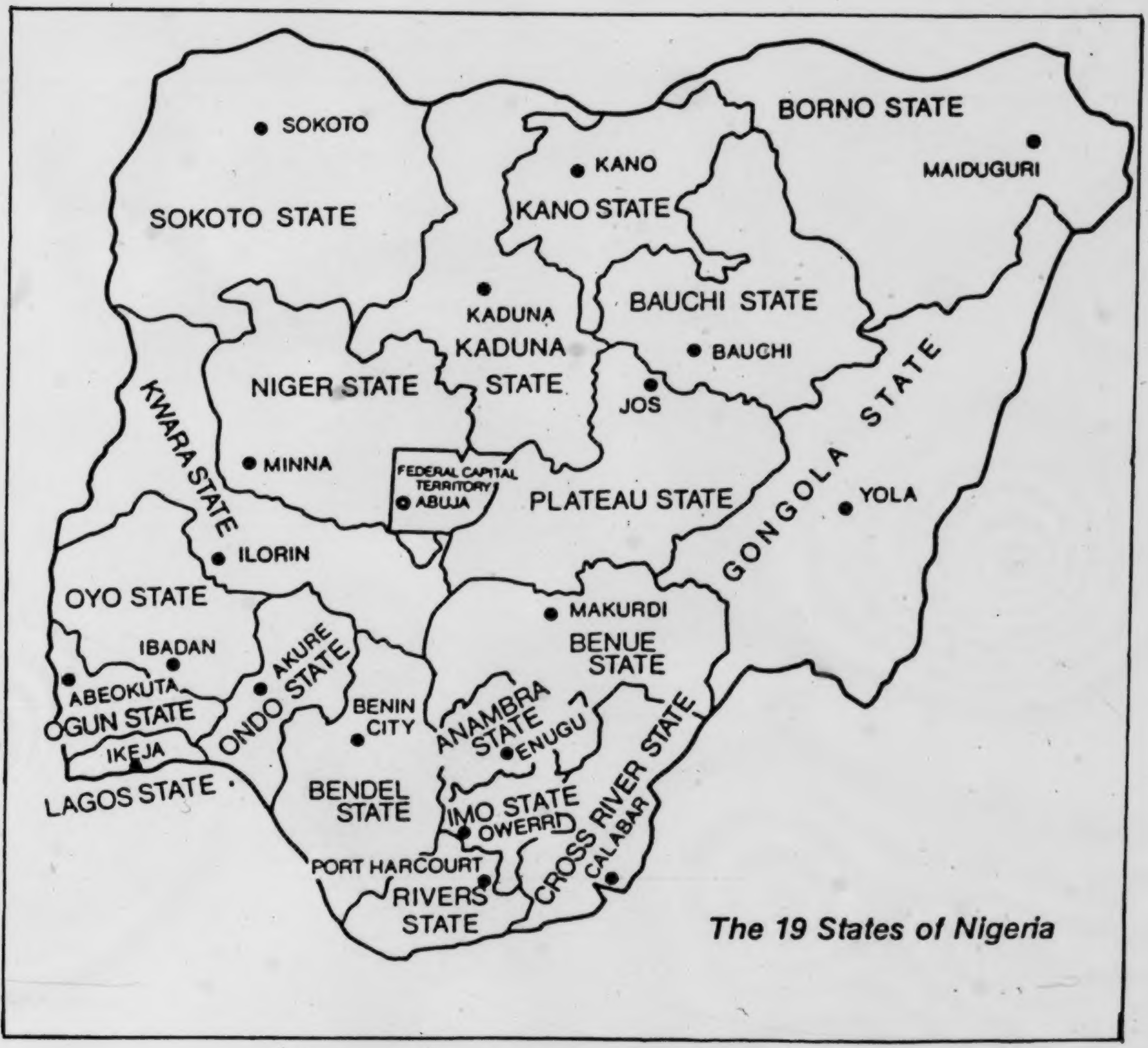
---

[1] Sources:

Federal Repulic of Nigeria; Implementation Committee for the National Policy on Education; Lagos Nigeria, 1979, pp. 32-73.

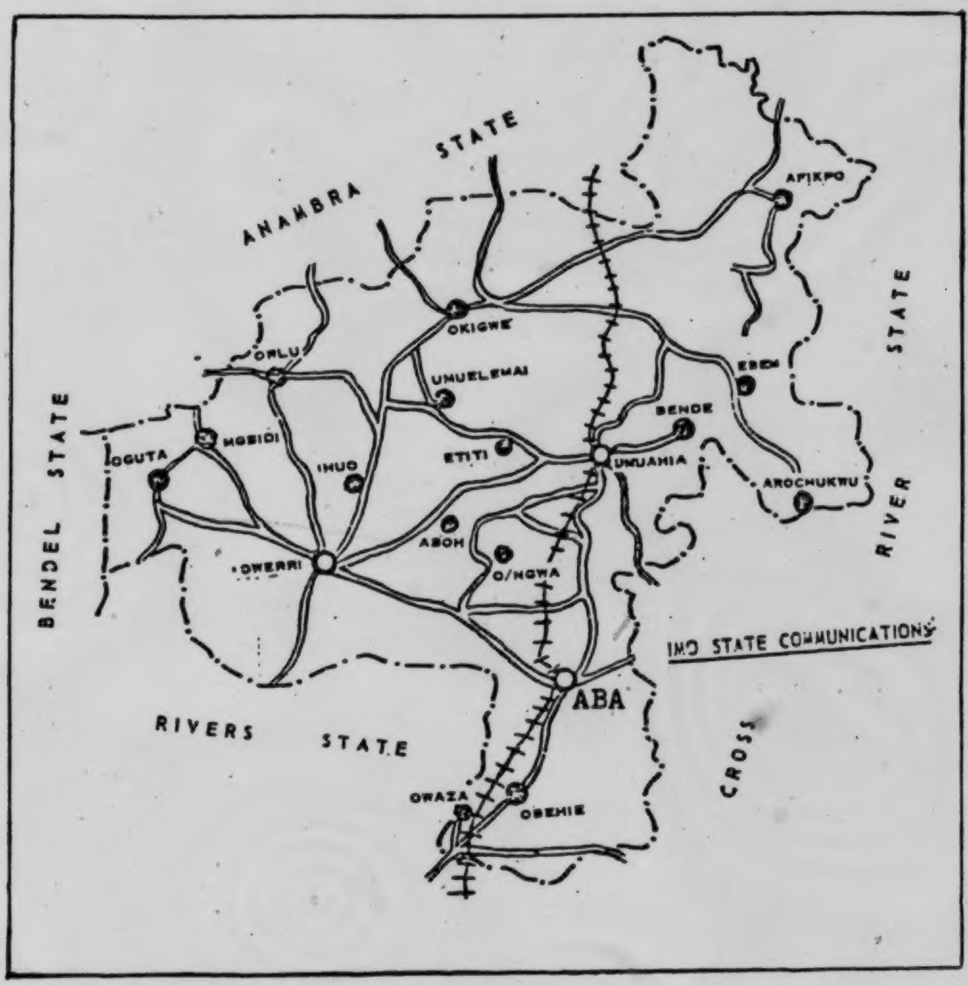
Aba Zonal Education Board, Aba Nigeria.

Map 1: NIGERIA



Source: News Review: Nigerian Information Service, Nigeria High Commission, Ottawa, Ontario, Canada, July 27, 1984.

Map 2: IMO STATE OF NIGERIA



Source: Introducing Imo State. Ministry of Education and Information, Aba, Imo State, Nigeria, p.28, 1984.

or Science. The National Certificate of Education (NCE) is generally regarded as the minimun adequate qualification for teaching in Nigerian secondary schools. In spite of this, over 55 percent of the teachers in this school system have qualifications that are less than the NCE.

School administrators (school, and supervising principals, superintendents and the chief education officer) possess at least one of numbers 3 and 4 qualifications listed above.

Teacher In-service Practices

Although in-service education is recognised as an important dimension of teacher education, teachers in Aba school system, like most of their counterparts in the nation, receive very little in-service education. In-service practices take the form of 2 to 3 day seminars and workshops organised by the administrators, once or twice a year. In addition to these, there are the yearly teacher conferences. Normally, less than 5 percent of the teachers have the opportunity to attend the seminars and workshops in a given year, and some teachers have never had the opportunity for any kind of in-service activity except the teachers' conferences. As a result, most of the teachers, throughout their long career, rely almost wholly on their initial preparation.

Social Condition

Aba school system is located in one of the most developed regions of Nigeria. There are two teacher training institutions within this school system. Transportation and communication in this region are typical of what is found in the whole of southern Nigeria. Although there are few modern roads, motor transport (which is the chief means of transportation) seems adequate, fast and affordable to most people. Postal service (which is the dominant means of communication) provides a fairly adequate service to the community. Much communication also takes place through the mass media.

In Nigeria, secondary school teachers are generally regarded as middle-class civil servants.

In view of the foregoing contextual information, it seems that there is a need for improved in-service activities for secondary school teachers in Aba school system. However, no systematic investigation, to this researcher's knowledge, has attempted to determine the type of in-service activities and the mode of delivery which these teachers and their administrators believe they need.

PURPOSE OF THE STUDY

Evidence from the literature cited earlier shows that a widely held view on in-service education is that there is a discrepancy between what educational leaders consider to be teachers' in-service needs and preferences and what teachers feel they need. One major purpose of this study, therefore, was to examine the differences between teachers' and administrators' perceptions of the nature and extent of the in-service needs of secondary school teachers in Aba School System, Imo State, Nigeria. Another purpose was to examine the differences btween teachers' and administrators' preferences regarding ways and means of meeting teachers' in-service needs. A final purpose was to make recommendations, based on the literature and the findings of this study, for improving future planning of in-service education programmes and activities.

THE PROBLEM

The main problem for this research was expressed in the question: what discrepancies exist between teachers' and administrators' perceptions of teachers' in-service needs and preferences? This problem gave rise to the following sub-problems:

1. What are teachers' perceptions of the importance of various teaching tasks and the amount of difficulty

experienced in performing the tasks?

2. What are administrators' perceptions of the importance of various teaching tasks and the amount of difficulty experienced by their teachers in performing the tasks?
3. How different are teachers' and administrators' perceptions of the importance of teaching tasks and the amount of difficulty experienced by teachers in performing the tasks?
4. What in-service opportunities for helping teachers overcome their teaching difficulties are currently available?
5. What are teachers' and administrators' preferences regarding in-service opportunities for teachers?
6. How different are teachers' and administrators' preferences for in-service opportunities for teachers?
7. What are teachers' and administrators' preferences on the in-service issues of financing, planning and organising, timing, delivery methods, and incentives for teachers' participation?
8. How different are teachers' and administrators' preferences on the in-service issues of financing, planning and organising, timing, delivery methods, and incentives for teachers' participation?
9. To what extent do the perceived teachers' in-service needs and preferences relate to the respondents' educational background, teaching experience, subject taught, and locale.

THEORETICAL SIGNIFICANCE OF THE STUDY

The view of many educators, as noted earlier, is that the failure of many in-service programmes is due to the fact that educational leaders often select and organise activities which they feel will be helpful to teachers without sufficient consultation with the teachers. An underlying assumption inherent in this argument is that there is a discrepancy between what educational leaders feel that teachers need and what teachers themselves believe that they need for their professional development and advancement. However, very few research studies have attempted to confirm or refute this widely held assumption. While the studies of Schreiber (1975) and Echevarria (1981) lend some support to this assumption, those of Zandi (1980), Nkere (1981) and Ramaiah (1984) do not. In fact, very few studies have attempted to examine simultaneously the view of teachers and administrators regarding teachers' in-service needs and preferences.

The need for such investigation was underscored by Horowitz (1978) when he raised a number of questions which should be sufficiently addressed in order to have a successful in-service programme. The questions include the following:

1. What are the similarities and what the discrepancies between what teacher leaders say teachers want and what teachers in a particular school feel they want?
2. ... should the system provide more tangible rewards such as degrees and adjustment in salary?
3. How are the coats to be covered?

Besides differences in perception, it has been argued that consultation or involvement by itself may make a difference in the effectiveness of a programme. According to Ingram and Mcintosh (1978:15-18) in order for an innovation to be successful the person introducing change must, among other things, involve all the parties concerned in the change process.

By providing more information on these issues, this study hopes to expand the existing knowledge and understanding of in-service education of teachers.

PRACTICAL SIGNIFICANCE OF THE STUDY

A study by the OECD (1982:58) revealed that many Member countries have few research findings on teachers' in-service needs, participation, and incentives to guide the improvement of in-service programmes. There is a general agreement among practitioners that in-service needs and preferences can be more effectively and validly determined if both teachers and administrators are involved (OECD,1982:59). As Harris (1980: 150) has noted, collaboration between teachers and administrators in all facets of in-service programmes is essential for a successful operation.

From a practical perspective, then, a greater understanding of how both teachers and administrators view teachers' in-service needs and preferences might lead to an improvement in future planning of in-service educational programmes.

The practical application of this study becomes even more important when the research population is taken into consideration. As described in Appendix B (Nigerian Universities Office Correspondence), indentification of teacher's in-service needs is one of the current educational needs of Nigeria.

In Nigeria, massive educational expansion during the last decade has resulted in the recruitment of teachers with extremely varied social, cultural and, particularly, educational background. Most of these teachers have found themselves performing tasks for which they had little preparation. An effective means of helping these teachers to improve their performance might be to offer them in-service activities which meet their needs.

It is hoped that this study would assist in providing a research base for improving future planning of in-service activities in Aba Secondary School System, Nigeria. It is also hoped that it would provide greater insight in the field of in-service education for teachers.

Delimitations

The data on in-service needs and preferences of secondary school teachers in Aba School system was limited to that provided by teachers and administrators in a random, stratified sample of schools, and school system administrators involved in providing teacher in-service programmes.

Limitations

The responses from the participants in this study might reflect only their opinions at the time of completion of the questionnaire or during the interview. In addition, their ability to remember the in-service activities that were available to them about a year earlier limits this study. Further, the fact that only secondary school personnel in one school system were involved in this study may limit its generalizability.

Assumptions

In this study it was assumed that the participants' perceptions of teachers' in-service needs and preferences could be objectively and effectively determined through the questions asked. It was also assumed that the respondents could and would accurately report their perceptions on teachers' in-service needs and preferences.

DEFINITIONS

The following definitions are used for the purpose of this study:

In-service education. This term refers to any organised learning activity for practicing teachers specifically designed to help them maintain or improve their professional competence.

Need is defined as a felt lack of the knowledge, skill or motivation necessary for effective teaching.

Preferences. This term denotes what the respondents consider as what ought to be with regard to in-service opportunities, planning, timing, delivery methods, programme financing and incentives for teacher participation.

Secondary School. This term refers to those schools under the jurisdiction of Aba Education Board which enrol students in Government Classes 1 to 5 and offer programmes of study authorized by the Imo State Ministry of Education.

Teachers. This term denotes individuals who are employed by Aba School system as secondary school instructors.

Administrators. This term refers to school personnel, such as principals, supervisors and superintendents, who are involved in providing in-service education for teachers.

ORGANISATION OF THE THESIS

This thesis consists of six chapters. This chapter presented the research area, the purpose and significance of the study, the research problem, delimitation and limitations, assumptions, and definition of terms.

A review of the related literature, and the conceptual framework of the study are presented in chapter 2. Chapter 3 describes the research methodology, instrumentation, sampling, and data collection and analysis.

Chapter 4 reports the analyses and findings of the questionnaire and interview data. The discussion of the findings of the study is presented in chapter 5. Chapter 6 summarizes the study, and discusses the implications of the findings.

CHAPTER 2

LITERATURE REVIEW

This review focuses on research studies related to teachers' in-service needs and preferences. The intent is to identify teaching task areas in which teachers express need for in-service as well as their preferences on major issues of in-service education. Research studies in the developed and developing countries are presented separately for the purpose of comparing summary of findings.

Concepts of in-service need are also presented and discussed. The major ideas highlighted in this section are used in developing the conceptual framework for the study.

Studies Related to the In-service Needs and Preferences of Teachers in the Developed Nations

The importance of gaining knowledge on the in-service activities and practices which teachers consider helpful is reflected in the increasing number of empirical inquiries in this area. Can (1969) was one of the early researchers who attempted to ascertain the kind of in-service activities which teachers believe they need.

He surveyed primary and secondary school heads and teachers in England and Wales in order to determine their views and preferences on in-service education for teachers. One of his major findings was that both school heads and teachers regarded topics under the headings teaching methods, aids and materials, and the development of new teaching schemes and programmes as priorities for teacher in-service training. Cane also reported that:

> ... (teachers) would like the bulk of in-service training to take place close to their own home or school, preferably during school hours, but failing that at a convenient starting time after school, for a half day or full day at week-ends or for up to one week during vacations (Cane,p. 30).

Cane also reported that teachers preferred course teaching methods that involved much participation such as observing and discussing demonstrations of lessons by other teachers. In addition, teachers were supportive of the broadcasting of in-service lessons but disapproved of the use of lectures without discussions. Finally, teachers felt that they were not consulted sufficiently in the planning and organising of in-service programmes.

Many studies related to in-service needs and preferences of teachers have been conducted in the province of Albert, Canada. A study by Staples (1970) attemped to determine the professional development needs of practicing teachers in Alberta. This researcher reported that teachers showed a strong desire for in-service activities designed to improve or update teaching methods or teach new curriculum. Teachers also wanted in-service courses to be practical in nature and relevant to the classroom situation. Further, Staples found that teachers were willing to attend professional development activities during the regular school day (substitute teacher provided) or several days before the school year opened. These findings substantiate those of Cane's study.

The results of studies by Schreiber (1975), Edmonton Public School Board (1978), and Altmann et al. (1979) are similar to those of Cane and Staples.

The purpose of Schreiber's study was to examine and categorize the in-service preference [illegible] teachers and administrators in Alberta. He reported that teachers considered the curricular areas titled teaching strategies and techniques, skill, knowledge and concepts as requiring more in-service emphasis. The curriculum area of rationale and philosophy was ranked least important. Teachers also indicated that the "workshop" was the most effective in-service delivery method, followed by classroom demonstrations and seminars. Teachers' conventions were the least preferred.

In the same study, teachers strongly indicated that paying them regular salary while attending in-service training during regular school hours was the highest incentive for them. Other incentives indicated by teachers were inclusion of special orientation activities for new teachers, greater input in in-service programmes, and release time from the classroom in order to attend in-service sessions. Finally, Schreiber found significant differences between teachers' and administrators' views regarding teachers' in-service needs in the areas of curriculum and planning.

In 1978 the Edmonton Public School Board conducted a professional development needs survey of the teachers in the school system. From a list of 41 teaching competencies teachers strongly expressed needs for in-service courses which dealt with the development of teaching strategies, selection of teaching aids, curriculum planning and pupil evaluation.

Altmann et al. (1979) surveyed 700 teachers in Calgary, Alberta, in order to detemine the aspects of pedagogy and content deemed necessary for inclusion in their in-service programme. They reported that teachers wanted mostly in-service activities that focused on language arts, especially reading and writing skills, motivation of students, special education , and classroom management.

More recent studies in Alberta validate earlier findings on teacher in-service preferences. Burke (1980) sought to determine teachers' perception and preferences concerning off-campus university courses and school district-sponsored in-service education in Alberta. She found that teachers placed priority on in-service courses that focus on how teachers can deal with individual differences among students, use a variety of teaching techniques, and integrate theory with practice. Teachers considered lectures, demonstrations, discussion and working groups as effective in-service teaching methods. They also preferred to have greater input in organising in-service courses. In this study Burke concluded that there was a gap between the in-service activities offered to teachers and what teachers felt they really needed. She recommended a cooperative and rational planning of in-service education programme.

A study by Pansegrau (1983) attempted to determine teachers perspectives on in-service education. She found that teachers attended formal in-service activities mainly to obtain information necessary for implementing a major programme change. Otherwise teachers sought to maintain or improve their teaching effectiveness by participating in non-formal activities such as;

> ... ongoing, in-school contact with colleagues, in particular with those who have a similar teaching assignment; reading professional literature, participating in program development; having student teachers and watching other teachers; and attending extra-curricular activities which have a spin-off to the classroom (Pansegrau, p. v-vi).

As Pansegrau noted these findings suggest that the traditional assumption that teachers attend formal in-service activities because they wish to improve their performance is inaccurate. These findings, like those of Burke, therefore indicate a discrepancy between teachers' and administrators' perception of teacher in-service needs and preferences.

Several studies related to teacher in-service needs and preferences have been conducted in the United States. For example, Zigarmi et al. (1977) studied teachers' preferences in and perceptions of in-service education in South Dakota. This study yielded the following findings; teachers considered as useful in-service activities that:

- introduced them to new ideas in education and responded to their needs in new ways other than through traditional college courses;
- were built on teachers' interests and provide them the opportunity to choose both the courses they need and the time to attend them;
- lasted longer than a day; fostered the exchange of ideas among teachers; and allowed teachers to have some control.

These researchers concluded that:

> Useful in-service education programs are planned in response to the assessed needs of teachers... teachers are more committed to staff development if they have been involved in planning and feel that they have some control over their own in-service experiences (Zigarmi et al. p. 550).

A survey of Tennessee school administrators and teachers was undertaken by Gickling et al. (1979) in order to assess their preferences regarding in-service training. They reported that teachers preferred to take an active role in determining the content of in-service courses. In addition, teachers wanted in-service sessions to be maintained at regularly scheduled intervals. Teachers also favoured the use of aides, volunteers, or other personnel as a means of gaining time for in-service training. These findings, like those of Zigarmi et al., are consistent with those of the Alberta Studies.

Further, the results of other American investigations also lend support to those already stated. King et al. (1977) surveyed 1,300 teachers in the United States in order to determine existing and desirable staff development practices. They reported that one of the distinct characteristics of the most successful programmes was the active involvement of teachers in the planning process.

Finally, Burrello and Orabaugh (1982) reviewed some of the current research findings on in-service education of teachers in the United States. One of their conclusions was that in-service training should be based on the needs of participants and should be sensitive to changing needs. They also stated that on-site demonstrations with students should be included when appropriate to an in-service experience, and that in-service activities should be conducted primarily during participants' normal work hours.

To summarize, evidence from the studies (Burke,1980 and Pansegrau, 1983, for example) suggests that administrators' perceptions of teachers' in-service needs and preferences may not adequately reflect teachers' needs and preferences. Also, it is evident from the studies that:

- teachers consider in-service education as an effective means of maintaining or improving their professional competence;
- teachers mostly want in-service activities that focus on the task areas of instructional methodology, curriculum planning, motivation of students, pupil evaluation, classroom management, integration of theory with practice, and how to deal with individual differences of children;
- teachers consider workshops, seminars, demonstrations, discussions and working groups as effective in-service presentation methods;
- teachers mostly prefer to attend in-service sessions

during regular school hours or vacation periods for at least one day, and close to their schools;

- teachers like to be involved in assessing their in-service needs.

Studies Related to the In-service Needs and Preferences of Teachers in the Developing Nations

The growing interest on how to make in-service education programmes more useful to teachers is not limited to the developed nations. Educators in the developing nations have joined in the search for information on the kind of in-service activities which teachers perceive to be beneficial to them. The increasing number of studies in this area attests to this interest.

The International Institute for Educational Planning (IIEP) evaluated a UNRWA/UNESCO in-service education programme for Palestine Refugees in the Near East. A major finding of this study was that teachers were motivated, enthusiastic, and committed to the programme because of:

> ... the incentive payments made to the trainees; the certificate issued at the end of the course; the fact that the content of the course is practical; and above all the fact that the majority of trainees soon became convinced of the value of the programme and its connexion with their teaching duties (UNESCO 1970:166).

This implies that teachers are committed to in-service activities from which they derive professional as well as personal benefits.

An evaluation of a teacher in-service programme mounted by the Institute of Education, Ahmadu Bello University, Nigeria, was conducted by Hawes and Ozigi (1975). This study revealed that teachers placed high priority on courses that dealt with teaching methods, school administration, guidance and counselling because they proved most useful to them. Courses on educational philosophy, statistics, sociology, and technology received very low priority. These findings are Consistent with those of IIEP because in both cases teachers strongly preferred more practical courses.

The fact that teachers showed very little interest in many of the courses offered them points to a discrepancy between administrators' and teachers' perceptions of teachers' in-service needs.

El-Mehdiwi (1977) examined the priority needs of elementary teachers for in-service education in two school districts in Libya. The respondents strongly indicated a need for in-service courses that provide information on teaching methods, especially in language arts, latest advancement in psychology of child development, and how to use audio-visual aids.

El-Mehdiwi found a relationship between the sex of teachers and their perceived in-service needs. He found no relationship between the number of years of teaching, degree held, subject taught and perceived needs for in-service.

A major finding of a similar study by Rakprja (1978) on secondary school teachers in Thailand was that teachers displayed a strong need for in-service courses dealing with teaching methods.

It appears, therefore, that teaching methods were of great importance to teachers in both studies.

More recent studies on the in-service needs of teachers in the developing world include those of Zandi (1980), Rosas (1980), Echevarria (1981) and Nkere (1981).

Zandi (1980) examined the professional development needs of elementary school teachers in Iran as perceived by the teachers, principals and in-service coordinators. He found that in-service needs of teachers with pre-professional preparation differed from that of those without pre-professional preparation. This contrasts with the finding of El-Mehdiwi in Libya.

In the same study, Zandi also found that teachers, principals and in-service coordinators expressed similar in-service needs and concerns. However, the principals placed more emphasis than the teachers on items related to student discipline and classroom management. Further, teachers felt the need to be involved in developing the purpose, activities, and methods of evaluating in-service courses.

A survey of school teachers and administrators from three regions of the Phillippines was conducted by Rosas (1980) in an attempt to ascertain their views regarding in-service education. One of his findings was that teachers considered administrators as the best instructors of in-service courses. In this study, teachers also indicated that the Ministry of Education was the best group to sponsor in-service programmes. Teachers showed a strong desire for courses that emphasized how to adapt recent Western education techniques to the Philippine conditions. In-service courses designed to help teachers improve their teaching skill were also highly desired. In addition, teachers favoured the use of summer vacation, weekends and holidays for in-service activities but with extra pay.

EChevarria (1981) studied the in-service training needs of elementary teachers as perceived by teachers and principals of schools of Puerto Rico. This researcher found that teachers and principals considered planning instruction as an in-service area of primary importance. Other than this, he reported that there were significant differences between principals' and teachers' perceptions of teachers in-service training needs. He also reported that significant differences were found in teachers' perception of in-service needs when grouped according to age, sex, grade level and years of teaching experience. This finding contrasts with that of El-Mehdiwi.

Finally, Nkere (1981) sought the opinion of untrained teachers in a rural school district in Imo State, Nigeria, on their need for improvement on 26 teaching competencies. She reported that teachers and administrators expressed strong desire for teachers to improve their knowledge of subject matter as well as teaching methods. Teachers also expressed a need for personal growth.

In summary, of the nine studies reviewed in this section, three (Zandi, 1980; Echevarria, 1981 and Nkere, 1981) attempted to compare teachers' and administrators' perceptions of teachers' in-service needs and preferences. The findings of Echevarria's study were not consistent with those of Zandi and Nkere where teachers' and administrators' perceptions of teachers' in-service needs were similar.

Like the studies in the developed nations, evidence from the studies reviewed in this section indicates that:

- teachers place priority on in-service courses that have direct connection with teaching, such as, teaching methods, planning of instruction, knowledge of subject matter, application of research findings to teaching, and student counselling;
- teachers like to attend in-service training during vacation periods;
- teachers like to be involved in planning and organising in-service activities;
- teachers' in-service needs may be related to some personal variables such as, educational background, teaching experience, and grade level taught.

It is interesting to note that these findings are similar to those from studies in the developed nations which were summarized earlier in this review. These research findings are incorporated in the conceptual framework and in developing the questionnaire for the study.

THE CONCEPT OF NEED

In view of the apparent discrepancy between teachers' and administrators' perceptions of teachers' in-service needs and preferences, four needs assessment models were examined in order to develop a conceptual framework for the study. Following is a summary of three of the models and, a more detailed presentation of the Sweitzer's model which was adapted for this study.

Battlle's Surveys

This is one of four needs assessment models compiled by Witkin (1977:7-8). This model assesses need by measuring conditions on two-five point scales:

1. perception of the extent to which the condition actually exists, the "actual state" (A);
2. perception of the extent to which the condition should exist, the "desired state" (D). The numerical difference between the two scale values, A and D, is the need index for each need statement.

This model is designed primarily for assessing the priority needs of an entire school system.

Westinghouse Surveys

This model, also compiled by Witkin (1977:7-8), is a three-way analysis of discrepancy using three different scales: perceived importance, perceived adequacy and perceived responsibility. The primary focus of this model is on students' skills, knowledge and attitudes.

Konrad et al. Model

Konrad et al. (1976:4) in-service needs assessment model presents need as having three dimensions, namely,

1. Importance - Is the need critically or significantly related to your job performance or not?
2. Urgency - Is the need of immediate concern or can it wait to be addressed?
3. Occurrence - Does the need arise frequently or not?

Sweitzer's Model

In his model, Sweitzer (1976:3-38) conceives in-service need as having two dimensions, namely,

1. Importance - whether an area of responsibility or task is important or not.
2. Difficulty - the amount of difficulty experienced in carrying our an important task or responsibility.

In the Sweitzer's model, an educator's needs are thought to be related to the tasks which he regards as important (personally, institutionally and professionally) and which also tend to be a problem to him in performing them. The difficulty an educator has in performing important tasks is used to define potential professional needs which could be met through in-service education.

Further, this model regards the perception of a task both as important and as a problem to be partially related to the educational as well as the experiential background of an educator.

In the main, this model identifies in-service needs by comparing job tasks perceived to be important and the level of difficulty encountered in performing those tasks.

Discussion

From the foregoing needs assessment models one may conclude that need is a multi-dimension variable. Second, "importance" seems to be the most common dimension of need. Another dimension of need which is common to two of the models (Westinghouse Survey and Sweitzer's) is "responsibility" or "task".

Of the four models, the Sweitzer's model was thought to be the most appropriate for this study. For one, it utilizes the two most common dimensions of need in the models presented. Secondly, it assess in-service needs through an indirect approach - comparing importance and difficulty of tasks. This approach was particularly appropriate for the study because it could help to elicit more accurate responses from those respondents who may, otherwise, have wanted to hide their teaching weakness. In view of this, the Sweitzer's model was adapted and used as the conceptual frame-work for this study.

THE CONCEPTUAL FRAMEWORK

The conceptual framework of this study (Fig.1) is an adaptation of Sweitzer's (1976) model. Like Sweitzer's model, it conceives of in-service need as being related to teaching

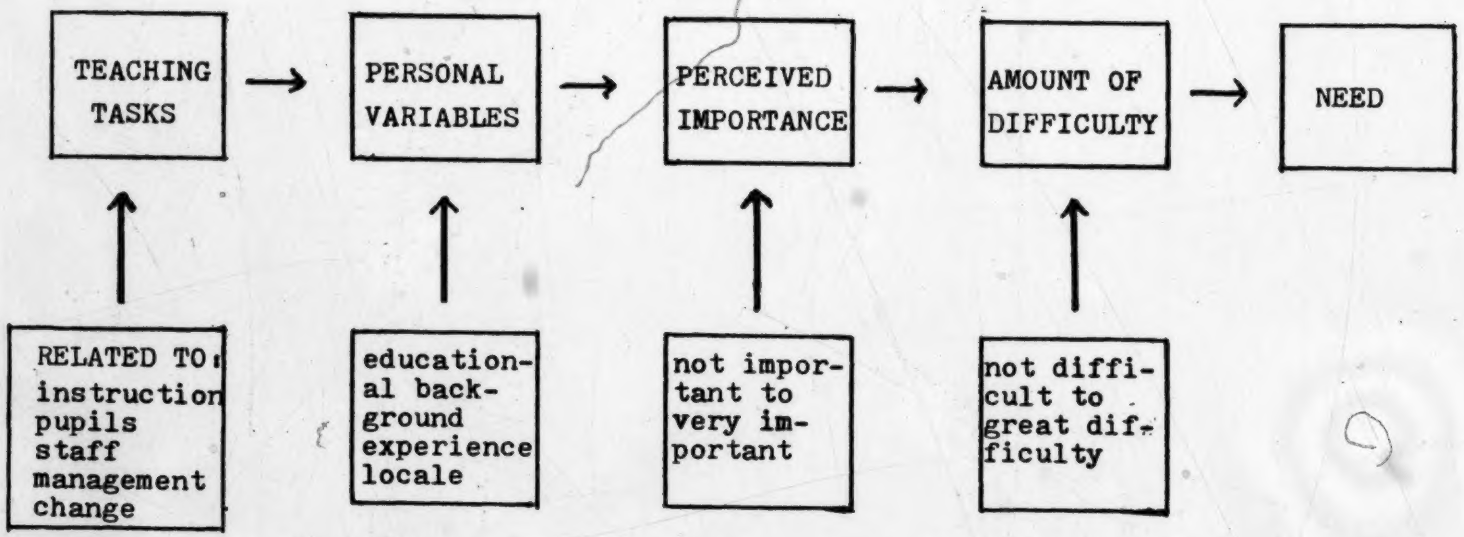

TEACHING TASKS
PERSONAL VARIABLES
PERCEIVED IMPORTANCE
AMOUNT OF DIFFICULTY
NEED
RELATED TO: instruction pupils staff management change
educational background experience locale
not important to very important
not difficult to great difficulty

Figure 1: A Framework for In-service Needs Assessment

tasks or responsibilities, personal variables, importance and difficulty. Unlike Sweitzer's model, however, in-service need is defined by the perception of the difficulty encountered in carrying out both important and relatively unimportant tasks. It therefore allows the determination of differences in teachers' and administrators' perceptions of teachers' in-service needs. Further, this framework regards the perception of tasks related to pupils, staff, and management as difficult to be partially related not only to the educational and experiential background but also to the locale of the educator.

Teaching tasks or responsibilities in the model represent teachers' duties in the school. The identification of these tasks was based on the literature reviewed for this study which revealed the tasks areas in which teachers display great need for in-service. For the purpose of this study these tasks were divided into five major areas: curriculum/instruction related, pupil related, staff related, management related, and change related.

Personal variables included in the model are amount and type of training, teaching experience, and locale. These were identified from the literature review which showed that they may be related to the in-service needs of teachers.

Importance refers to the perceived level of importance of each teaching task by the respondents. Difficulty represents the degree of difficulty experienced in performing each task.

The development of the instruments for this study was largely based on this concept of in-service education needs.

In this study the respondents' perceptions of the amount of difficulty experienced by teachers in performing their tasks was used to determine potential in-service needs of the teachers.

SUMMARY

Research studies in the developed and the developing nations which relate to teacher in-service needs and preferences were presented in this chapter. The intent was to highlight the task areas in which teachers place high priority for in-service as well as their preferences on majore in-service issues. Evidence from the literature indicates that very few studies have examined simultaneously teachers' and administrators' perceptions of teachers' in-service needs and preferences. Also, teachers display a strong need for in-service courses that focus on teaching methods, instructional planning and the subject area being taught. Teachers also like to attend in-service training during vacation periods and would like to be involved in assessing their in-service needs.

An adapted version of Sweitzer's in-service needs assessment model was presented as the conceptual framework for the study. The framework utilizes the perception of the difficulty experinced in performing both important and relatively unimportant tasks in determing potential in-service needs.

As such, it allows the determination of differences in teachers' and administrators' perceptions of the in-service needs of teachers. The literature review revealed task areas in which teachers express need for in-service as well as certain social variables that may be related to teachers' in-service needs. These task areas and social variables were incorporated in the framework for the study.

CHAPTER 3

RESEARCH METHODOLOGY AND DESIGN

This chapter presents the general methodology of the study as well as the instrumentation, sampling and data analysis procedures. The characteristics of the respondents are also presented.

Research Methodology

The major purpose of this study was to examine the differences in the perceptions of secondary school teachers and administrators regarding the in-service needs and preferences of teachers in Aba school system, Imo State, Nigeria. A second purpose was to examine the nature and extent of need perceived by the teachers and administrators. A final purpose was to recommend ways and means for improving future planning of in-service education based on the literature and the findings of this study. In view of these purposes, the descriptive research methodology was used for this study.

According to Verma and Beard (1981:58-60) the descriptive method of research is concerned with a clear definition of the problem and the collection of facts and opinions about the present condition of things. It also "involves elements of comparison and relationships of one kind or another" as well as some "interpretation of meaning or significance of what is described." Similarly, Van Dalen (1979:284) states that descriptive research not only gathers information about prevailing conditions, practices and attitudes but also identifies and clarifies relationships among variables. Gay (1976:10) adds that descriptive research involves assessing attitudes or opinions of individuals concerning the current status of the subject being investigated.

This study was concerned with comparisons, relationships, and attitudes or opinions of teachers and administrators regarding teachers' in-service needs and preferences and, as such, exhibits the foregoing characteristics of descriptive research.

Instrumentation

The data for this study were collected through two widely accepted descriptive research procedures, namely, questionnaires and interviews (Gay,1976:10; Van Dalen, 1979:285; and Verma and Beard, 1981:57). The questionnaire, however, was the main instrument used.

Questionnaires

According to Ary et al. (1972:169) the questionnaire is very efficient and practical and allows for the use of large samples. Van Dalen (1979:152) adds that the questionnaire allows objectivity, intensity and standardization of the observations of the respondents.

Two similar questionnaires, one for teachers, the other for administrators, (see Appendix A) were used in this study. The questionnaires consisted of closed questions: a set of categories for the respondents to check (Good, 1972:230), with opportunities for comments. The questions were based on instruments such as those used by Pawluik and Pickard (1976), Sweitzer (1976) and Edmonton Public School Board (1978), and other concepts obtained from the review of the literature.

The "Teacher" and "Administrator" Questionnaires were based on the conceptual framework and the major ideas drawn from the review of the literature. The questions were designed to provide information on the research questions for the study. The questionnaires consisted of four sections, namely:

Section 1: This section requested the following personal data: levels of education and teacher education, teaching experience, major subject taught, and school location.

Section 2: In this section the respondents were asked to indicate how important and how difficult they perceive 25 teaching tasks to be by circling the appropriate number on two four-point (Likert) scales. For the purpose of this study, task item numbers 1 to 12 are considered as curriculum/instruction related; 13 to 18 pupil related; 19 to 21 staff related; 22 and 23 management related; and 24 and 25 change related.

Section 3: This section requested the respondents to indicate the degree of availability of 11 in-service opportunities and their preferences for these opportunities by circling the appropriate numbers on two four-point scales.

Section 4: This section asked the respondents to indiacte their opinions regarding five major in-service issues, namely, funding, planning and organising, timing, delivery methods, and incentives for teacher participation.

Interviews

Interviews, according to Gay (1976:134), have the advantage of being flexible and may yield more accurate and honest responses since they allow the investigator to explain and clarify the questions. Van Dalen (1979:158-160) notes that interviews allow the investigator to probe deeper into a problem. Borg and Gall (1983:442) believe that the semistructured interview is the most appropriate for education studies. For one, it allows the use of initial responses to probe deeper in order to better understand the respondent's opinions and the reasons behind them. Further, it has the advantage of being reasonably objective.

The interview guide for this study was semistructured (see Appendix A) and consisted of two sections. The first section sought general information regarding the educational preparation of teachers and administrators, current in-service practices, and social condition. The second sought for reasons behind initial responses on in-service funding, planning, timing, delivery methods and incentives for teacher participation. The intent was to obtain more in-depth information not possible with the questionnaires. The interviews also served to establish some validity for the questionnaires.

Twenty one teachers and 7 administrators were interviewed.

Validity of Instruments

According to Kerlinger (1973:45) validity has to do with the question: "Are we measuring what we think we are measuring?" For Verma and Beard it refers to how successful an instrument measures what is claims to be measuring. Van Dalen (1979:136) adds that it involves sufficient coverage of the various aspects of the problem being examined.

To help insure the validity, clarity of statements, unambiguity and logical sequence of questions, the questionnaires were reviewed three times by selected faculty members of the Department of Educational Adminitration, The University of Alberta. Each review was followed by a pre-test on groups of secondary school teachers and administrators from Anambra State-a neighbouring school system to Imo. The questionnaires were modified based on the recommendations of the above persons.

Sampling Procedures

The population represented in this study comprised secondary school teachers (1,105) and principals (73) in 73 schools, and 5 professional zonal office administrators (4 supervising principals/superintendents and the chief education officer) in Aba school system for the 1983-84 academic year. The 73 schools were stratified according to their locations, 20 urban and 53 rural schools, to ensure a fair representation from both areas. Six schools were randomly selected from the 20 urban schools and 12 were randomly selected from the 53 rural schools. The teachers (251) and principals (18) in the

18 schools and the 3 zonal office staff comprised the sample for this study. Thus, the sample size comprised of 22.7 percent of the teachers, 25 percent of the principals, and 60 percent of the central office administrators involved in providing in-service activities for teachers (Table 3.1).

Table 3.1

Summary of Population, Sample and Returns

	Population	Sample		Returns	
Position	No.	No.	% population	No.	% Returns
Teachers	1,105	251	22.7	200	79.7
Principals	73	18	24.6	18	100.0
Zonal Administrators	5	3	60.0	3	100.0
Total	1,183	272	23.0	221	81.4

Data Collection

Permission to conduct this study was obtained from both the Chairman and the Chief Education Officer, Zonal Board, Aba (see Appendix B). The researcher visited Nigeria in March, 1984 for the purpose of distributing the questionnaires and conducting the interviews. The researcher distributed the questionnaires to 251 teachers and 18 principals in 18 schools, and to 3 Zonal Education Office staff, with the instruction to complete and seal them in the envelopes provided. The purpose of the study was also stated. The respondents were allowed one week to complete the questionnaires after which they were collected by the researcher. More time was given to respondents who could not meet the first time limit. It was during the collection process that the researcher interviewed 21 teachers and 7 administrators. The entire exercise lasted for five weeks after which the returns from the teachers was 80 percent, and administrators 100 percent (Table 3.1). Sample returns according to schools exhibited in Table 3.2 shows that the distribution of respondents approximates that in the total sample.

Characteristics of Respondents

In presenting the characteristics of the respondents, it should be noted that only in two cases (number of teachers with bachelor's degree and grade II certificate) were the corresponding data for the research population made available to the researcher. Consequently, the comparison of the characteristics of the respondents to the population was limited to these cases.

Highest degree held. As presented in Table 3.3, the majority of teacher respondents (69 percent) had less than a bachelor's degree while 31 percent had a bachelor's degree or more: 25 percent, bachelor's; 2.5 percent, diploma after bachelor's; 1.5 percent, master's; and 1 percent, doctorate degree. The percentage of teacher respondents with a bachelor's degree (25 percent) approximates that (24.3 percent) for the entire school system (Table 3.4).

Table 3.2

Questionnaire Distribution and Returns by Schools

School No.	Distributed	Returned	Non-Returns	No. Usable	No. Unusable
1.	16	13	3	13	
2.	22	19	3	22	
3.	21	18	3	18	
4.	7	6	1	6	
5.	14	12	2	14	
6.	13	11	2	11	
7.	16	12	4	12	
8.	17	14	3	14	
9.	8	6	2	8	
10.	19	13	6	13	
11.	13	11	2	11	
12.	10	7	3	7	
13.	16	12	4	12	
14.	22	18	4	18	
15.	8	6	2	6	
16.	14	8	6	8	
17.	7	6	1	6	
18.	8	8		8	
Total	251	200	51	200	

Table 3.3

Distribution of Respondents by Highest Degree Held

	Teachers (N=200)		Administrators (N=21)	
Highest Degree	Frequency	%	Frquency	%
Less than Bachelor's	138	69.0	3	14.3
Bachelor's	50	25.0	12	57.1
Diploma after Bachelor's	5	2.5	4	19.0
Master's	3	1.5	1	4.8
Doctorate	2	1.0	1	4.8
Not reported	2	1.0		
Total	200	100.0	21	100.0

Table 3.4

Percentage of Bachelor's Degree and Grade II Teacher Respondents Compared with the Percentage in Aba School System

Qualification	Population		Respondents	
	No.	%	No.	%
Grade II	475	43.0	85	42.5
Bachelor's Degree	269	24.3	50	25.0
Others	361	32.7	65	32.5
Total	1105	100.0	200	100.0

Table 3.3 also shows that about 14 percent of the administrators (3 vice principals who completed the questionnaires on behalf of the principals) had less than a bachelors degree; 57 percent had a bachelor's degree, 19 percent had a diploma after a bachelor's degree, and master's and doctorate degree holder comprised about 4 percent each. To facilitate data analysis, the groups were collapsed into three, namely, less than bachelor's; bachelor's; and diploma after bachlor's, master's and doctorate degrees.

Level of Teacher Education. When respondents were grouped on the basis of the highest level of teacher education received (Table 3.5), the data revealed that among the teachers, about 42 percent had the teacher education (advanced teacher training and bachelor of education) considered to be adequate for teaching in Nigerian secondary schools. About 43 percent had Grade II teacher's training (a preparatory programme for elementary school teachers), while approximately 10 percent had no training at all. It should be noted that Grade II teachers also comprise of 43 percent of instructional staff population in Aba school system (Table3.4).

Table 3.5 shows that the highest level of teacher education for approximately 48 percent of the administrators was teacher's Grade II. About 29 percent had bachelor of education and about 5 percent had no form of teacher training. For data analysis, the teacher education levels for administrators were collapsed into 2 groups, namely,grade II and bachelor of education holders.

Table 3.5

Distribution of Respondents by Highest Level of Teacher Education Received

	Teachers (N=200)		Administrators (N=21)	
Teacher Education	Frequency	%	Frequency	%
None	19	9.5	1	4.8
Grade II	85	42.5	10	47.6
Advanced	61	30.5		
Bachelor of Education	22	11.0	6	28.6
Other	12	6.0	4	19.0
Not reported	1	.5		
Total	200	100.0	21	100.0

Years of teaching or administrative experience. With regard to years of teaching experience (Table 3.6), approximately 38 percent of the teachers had 1 to 5 years, 30 percent had 6 to 10 years, about 9 percent had 11 to 15 years, about 7 percent had 16 to 20 years of experience. The data on Table 3.6 also reveal that there were 19 percent of the administrators with 1 to 5 years of administrative experience. Approximately 33 percent had 6 to 10 years, about 24 percent had 11 to 15 years, about 10 percent had 16 to 20 years and over 20 years of experience each. To facilitate data analysis, these 5 groups were collapsed into 3, for the administrators, as follows: 1 to 5 years, 6 to 10 years and 11 years or more.

Table 3.6

Distribution of Respondents by Years of Teaching (for Teachers) and Administrative (for administrators) Experience

	Teachers (N=200)		Administrators (N=21)	
Teaching/Administrtive Experience	Frequency	%	Frequency	%
1-5 years	75	37.5	4	19.0
6-10 years	60	30.0	7	33.3
11-15 years	17	8.5	5	23.8
16-20 years	13	6.5	2	9.5
Over 20 years	35	17.5	2	9.5
Not reported			1	4.5
Total	200	100.0	21	100.0

Location of school. As is exhibited in Table 3.7, approximately 44 percent of the teachers and 43 percent of the administrators were from urban schools. There were about 57 percent of the teachers and 57 percent of the administrators from rural schools. As displayed in Table 3.8, the percentages of teacher respondents from urban (43.5) and rural (56.5) schools approximate those for the sample: 43.4 for urban and 56.6 for rural schools.

Table 3.7

Distribution of Respondents by School Location

	Teachers (N=200)		Administrators (N=21)	
School Location	Frequency	%	Frequency	%
Urban	87	43.5	9	42.9
Rural	113	56.5	12	57.1
Total	200	100.0	21	100.0

Table 3.8

Percentage of Urban and Rural Returns
Compared with the Percentage on the Sample

	Sample		Returns	
School Location	No.	%	No.	%
Urban	109	43.4	87	43.5
Rural	142	56.6	113	56.5
Total	251	100.0	200	100.0

Major subject taught. When the teacher respondents were grouped on the basis of the major subject taught (Table 3.8), the data revealed that about 31 percent taught language arts, 11 percent taught mathematics, about 26 percent taught science, 21 percent taught social studies, and 12 percent taught subjects other than those mentioned above.

Data Analysis

The data from the teacher and administrator questionnaires were computer analysed so as to determine frequencies and mean scores. The respondents were grouped on the bases of selected personal characteristics which were considered as independent variables. The independent variables were highest degree held, level of teacher education, experience, and location for teachers and administrators; and subject taught for teachers..

The one-way analysis of variance (level of significance .05) and Scheffe Multiple Comparison of Means (level of significance .1) were used to determine differences between more than one pair of means. Differences between one pair of means were determined by using the t-test with a level of significance of .05.

The information obtained from the interviews was grouped and reported according to their various subject matter.

SUMMARY

This chapter discussed the descriptive research methodology which is the method of research used in this study. Also, the use and development of the questionnaires and interview guide for data collection were discussed. The data analysis procedure and the characteristics of the respondents were also presented.

CHAPTER 4

PRESENTATION OF FINDINGS

One purpose of this study was to examine the differences in teachers' and administrators' perceptions of the nature and extent of the in-service needs of secondary school teachers in Aba school system, Imo State, Nigeria. Another purpose was to examine the differences between teachers' and administrators' preferences regarding ways and means of meeting the in-service needs of teachers. A final purpose was to develop ways and means of improving in-service education planning and programming. The sub-problems addressed by this study were designed to accomplish these purposes.

In this chapter, the findings on the sub-problems are presented in four sections. The first section presents the findings on teachers' and administrators' perceptions of the importance and difficulty of teaching tasks. The findings on the availability of and preferences for in-service opportunities are reported in the second section. The third section reports the findings on the respondents' preferences on the in-service issues of financing, planning and organising, timing, delivery methods, and incentives for teachers' participation. Information obtained from the interviews is reported in the fourth section.

In each section the data are categorized, analyzed and presented. A summary of the findings is presented at the end of the chapter.

PERCEPTIONS OF THE IMPORTANCE AND DIFFICULTY OF TEACHING TASKS

The main objective of this section is to determine the differences between teachers' and administrators' perceptions of the nature and extent of teachers' in-service needs through the information obtained from sub-problems 1, 2 and 3. The respondents' perceptions of the level of difficulty experienced by teachers in performing their tasks was used as a basis for identifying potential in-service needs of the teachers.

To facilitate the reporting of respondents' perceptions of teachers' in-service needs, the mean scores on the items on sub-problems 1,2 and 3 were grouped into four categories (Table 4.1). In the grouping, a mean score of 3.50 - 4.0 is categorized as "high"; 3.0 -3.49 is categorized as "moderate"; 2.50 - 2.99 is categorized as "fairly moderate"; and a mean score of 1.0 - 2.49 is categorized as "low." These categories were used in describing the respondents' perceptions of the importance and difficulty of teachers' tasks and, in effect, their in-service needs.

Tasks which the respondents or their sub-groups assign a mean rating of 2.50 ("fairly moderate") or more with regard to their difficulty are deemed to be potential need areas which might be met through appropriate in-service education.

For the purpose of this study, 12 of the tasks (numbers 1 to 12) are considered to be curriculum and instruction related; 6 (numbers 13 to 18) are pupil related; 3 (numbers 19 to 21) are staff related; 2 (numbers 22 to 23) are management related; and 2 (numbers 24 to 25) are change related.

Table 4.1

Categories of Mean Score

Mean Score Range	Category
3.50 - 4.00	High
3.00 - 3.49	Moderate
2.50 - 2.99	Fairly Moderate
1.00 - 2.49	Low

Sub-problem 1: What are teachers' perceptions of the importance of various teaching tasks and the amount of difficulty experienced in performing the tasks?

Information on this sub-problem was obtained by asking the teachers to rate the degree of importance and difficulty of 25 teaching tasks on a four-point Likert-type scale. The items were ranked on the basis of their mean scores (Table 4.2).

Findings. With respect to the importance of teaching tasks (Table 4.2), the teacher respondents assigned the highest mean rating (3.93) to the task of developing and maintaining knowledge in the subject area in which they teach. Planning and preparing lessons, and understanding students' learning problems received the second and third highest mean ratings of 3.91 and 3.83 respectively. The lowest mean rating (2,95) was assigned to the task of teaching classes of varied abilities. On the whole, 19 tasks were rated "high", 5 were rated "moderate", and 1 was rated "fairly moderate" with regard to their importance.

With reference to the amount of difficulty experience by teachers in performing the various tasks (Table 4.2), the teacher respondents gave the highest mean rating (3.13) to the task of teaching classes of varied abilities. Dealing with students who cause a lot of trouble in school was given the second highest rating of 3.06; and implementing a new programme in the school received the third highest rating of 2.76. Attending staff meetings received the lowest mean rating of 1.29.

Table 4.2

Mean Scores and Rank Order of the Importance and Difficulty of Teaching Tasks for Teacher Respondents
(N=200)

		IMPORTANCE			DIFFICULTY		
No.	Teaching Task	Mean	SD	Rank	Mean	SD	Rank
1.	Developing and maintaining knowledge in the subject area which you teach	3.93	0.30	1	2.22	0.93	10
2.	Interpreting the syllabus (curriculum) for your subject area	3.69	0.69	7.5[1]	1.92	0.98	17.5[1]
3.	Planning and preparing lessons	3.91	0.38	2	1.93	0.93	16
4.	Evaluating and selecting teaching materials	3.68	0.62	9.5[1]	2.37	0.99	9
5.	Using various teaching techniques for instruction	3.73	0.59	6	2.08	1.02	13
6.	Teaching classes of varied abilities	2.95	0.98	25	3.13	1.01	1
7.	Applying recent educational findings in the classroom	3.64	0.70	13.5[1]	2.50	1.10	5.5[1]
8.	Using teaching aids	3.81	0.54	4	2.19	1.11	11

Table 4.2 (continued)

No.	Teaching Task	IMPORTANCE Mean	IMPORTANCE SD	IMPORTANCE Rank	DIFFICULTY Mean	DIFFICULTY SD	DIFFICULTY Rank
9.	Constructing, marking, and interpreting student examinations	3.78	0.50	5	2.42	1.06	7
10.	Using instructional time effectively	3.61	0.71	17.5^1	1.88	0.89	19
11.	Evaluating self performance	3.61	0.69	17.5^1	2.14	1.06	12
12.	Using available professional literature to help improve your knowledge and competence	3.51	0.82	19	2.05	1.00	15
13.	Communicating effectively with students	3.68	0.71	9.5^1	1.82	0.95	20
14.	Understanding students' learning prolems	3.83	0.43	3	2.41	1.03	8
15.	Motivating students	3.63	0.70	15	2.06	0.90	14
16.	Guiding and counselling students	3.65	0.65	12	2.50	1.05	5.5^1
17.	Dealing with students who cause a lot of trouble in school	3.45	0.78	21.	3.06	1.05	2
18.	Maintaining good relationship with students	3.62	0.68	16	1.92	0.93	17.5^1
19.	Attending staff meetings	3.48	0.75	20	1.29	0.63	25

Table 4.2 (continued)

No.	Teaching Task	IMPORTANCE Mean	SD	Rank	DIFFICULTY Mean	SD	Rank
20.	Communicating effectively with staff members	3.41	0.80	23	1.49	0.76	24
21.	Working cooperatively with staff members	3.69	0.65	7.5[1]	1.79	0.80	21
22.	Communicating effectively with school administrators (e.g. principal and supervisors)	3.64	0.66	13.5[1]	1.73	0.91	23
23.	Cooperating with school administrators (e.g. principal and supervisors)	3.66	0.65	11	1.76	0.89	22
24.	Implementing a new programme in the school	3.31	0.74	24	2.76	1.03	3
25.	Adjusting to changes in the school or school system	3.44	0.79	22	2.54	1.05	4

[1] denotes tied rank

Overall, teachers perceived the difficulty of 2 tasks to be "moderate", and the difficulty of 4 tasks to be "fairly moderate." The difficulty of 19 tasks was perceived to be "low."

Analysis on the bases of social characteristics

More analyses of teachers' responses on the importance and difficulty of teaching tasks were undertaken to examine the relationship between these responses and teachers' social characteristics. The respondents were grouped on the bases of 6 social categories, namely, school (18 schools); highest degree held (less than bachelor; bachelor; and diploma after bachelor, master and doctorate); level of teacher education (none, Teachers' Grade II, Advanced Teachers' Training, and bachelor of education); teaching experience (1-5 years, 6-10 years, 11-15 years, 16-20 years, and over 20 years); major subject taught (language arts, mathematics, science, and social studies); and school location (urban, and rural). Differences between one pair of means were determined by using the t-test with a level of significance of .05. The Oneway analysis of variance and Scheffe procedure (F-test) were used to determine differences between more than one pair of means. The level of significance for the F-test was .10.

Findings. These analyses revealed that there were no significant differences in teachers' perceptions of the importance and difficulty of teaching tasks when grouped on the bases of their school, level of teacher education, teaching experience, and subject taught. However, significant differences were observed in their perceptions of the difficulty of 3 tasks when grouped on the basis of the highest degree held, and 1 task when grouped according to their locale (Tables 4.3 and 4.4).

Highest degree held. As shown in Table 4.3, the mean score (2.05) of group 1 teachers (those with less than a bachelor's degree) is statistically higher than the mean score (1.58) of group 2 (those with a bachelor's degree) with regard to the difficulty of Task Number 2 - interpreting the syllabus (curriculum) for their subject area. Both groups, however, perceived the difficulty of this task to be "low."

With regard to the difficulty of Task Number 17 - dealing with students who cause a lot of trouble in school - the mean score (3.18) for group 1 teachers (those with less than a bachelor's degree) fell in the "moderate" category, while the mean score (2.73) for group 2 teachers (those with a bachelor's degree) fell in the "fairly moderate" category. The difference between the mean scores of these two groups is statistically significant (Table 4.3).

Table 4.3 also shows that the mean scores for teachers with (1) less than a bachelors degree (1.90); (2) bachelor's degree(1.60); and (3) diploma after a bachelor's degree, master's and doctorate degrees (1.22) fell in the "low" category with reference to the difficulty of Task Number 21 -

Table 4.3

Differences in Mean Scores of Difficulty of Three Teaching Tasks Based on the Highest Degree Held by Teachers

Task no.	Degree group[1]	N	Mean	SD	F	P	Scheffe (P<.1)
2	1	124	2.05	0.99	4.72	0.01	2-1
	2	45	1.58	0.87			
	3	9	1.56	0.53			
17	1	129	3.18	1.00	3.48	0.03	2-1
	2	48	2.73	1.09			
	3	9	3.22	1.09			
21	1	124	1.90	0.82	4.99	0.01	2-1,3-1
	2	45	1.60	0.69			
	3	9	1.22	0.67			

[1] Degree group: 1= Less than bachelor; 2= Bachelor; 3= Diploma after bachelor, Master and Doctorate.

working cooperatively with staff members. However, the differences in the mean score for teachers with less than a bachelor's degree and each of the other groups are statistically significant.

School location. The data in Table 4.4 shows that when teachers were grouped on the basis of their school location the mean score (2.0) for urban teachers was statistically higher than that (1.65) for rural teachers with regard to Task Number 23 - cooperating with school administrators (e.g. principal and supervisors).

Table 4.4

Difference in Mean Scores of Difficulty of One Teaching Task Based on the Locale of Teachers

Task no.	Locale	N	Mean	SD	T	P
23	Urban	65	2.00	1.02	2.10	0.04
	Rural	113	1.65	0.78		

Sub-problem 2: What are administrators' perception of the importance of various teaching tasks and the amount of difficulty which their teachers experience in performing these tasks?

As in sub-problem 1, information on sub-problem 2 was obtained by asking the administrators to rate, on a four-point Likert-type scale, the degree of importance of 25 teaching tasks as well as the amount of difficulty which they felt their teachers encountered in performing these tasks.

Findings: A summary of the analysis of data on sub-problem 2 is presented on Table 4.5. As regards the importance of teaching tasks, the administrator respondents assigned the highest mean rating of 3.95 to 3 tasks, namely, planning and preparing lessons, using teaching aids, and communicating effectively with students. The second highest mean rating (3.91) was given to 3 other tasks: developing and maintaining knowledge in the subject area in which they teach; constructing, marking, and interpreting student examinations; and motivating students. Like the teachers, the administrators assigned the lowest mean rating (3.05) to the task of teaching classes of varied abilities. Likewise, their rating of the importance of the teaching tasks was generally high.

Concerning the difficulty experienced by teachers in carrying out their tasks (Table 4.5) the administrators assigned the highest mean rating (3.30) to the task of applying recent educational findings in the classroom. Evaluating self performance received the second highest rating of 3.0; and dealing with students who cause a lot of trouble in school was given the third highest rating of 2.95. Two tasks, attending staff meetings, and communicating effectively with staff members received the lowest mean rating of 1.43.

On the whole, the administrators perceived 2 tasks to be "moderate", 15 to be "fairly moderate", and 8 tasks to be "low" in difficulty for their teachers.

Table 4.5

Mean Scores and Rank Order of the Importance and Difficulty of
Teaching Tasks for Administrator Respondents
(N=21)

		IMPORTANCE			DIFFICULTY		
No.	Teaching Task	Mean	SD	Rank	Mean	SD	Rank
1.	Developing and maintaining knowledge in the subject area in which they teach	3.91	0.30	4.3[1]	2.86	0.73	7
2.	Interpreting the syllabus (curriculum) for their subject area	3.76	0.54	12.3[1]	2.48	0.87	18
3.	Planning and preparing lessons	3.95	0.22	1.3[1]	2.74	0.81	12
4.	Evaluating and selecting teaching materials	3.81	0.40	10	2.85	0.81	8.5[1]
5.	Using various teaching techniques for instruction	3.67	0.58	16.2[1]	2.76	1.00	11
6.	Teaching classes of varied abilities	3.05	0.92	25	2.91	1.00	4.3[1]
7.	Applying recent educational findings in the classroom	3.62	0.59	20	3.30	0.66	1
8.	Using teaching aids	3.95	0.22	1.3[1]	2.62	1.02	14

Table 4.5 (continued)

No.	Teaching Task	IMPORTANCE Mean	IMPORTANCE SD	IMPORTANCE Rank	DIFFICULTY Mean	DIFFICULTY SD	DIFFICULTY Rank
9.	Constructing, marking and interpreting student examination	3.91	0.30	4.3^1	2.91	0.89	4.3^1
10.	Using instructional time effectively	3.80	0.41	11	2.85	0.95	8.5^1
11.	Evaluating self performance	3.67	0.58	16.2^1	3.00	1.00	2
12.	Using available professional literature to help improve your knowledge and competence	3.57	0.75	21.3^1	2.70	0.98	13
13.	Communicating effectively with students	3.95	0.22	1.3^1	2.14	0.96	19
14.	Understanding students' learning problems	3.76	0.44	12.3^1	2.91	0.94	4.3^1
15.	Motivating students	3.91	0.30	4.3^1	2.60	0.94	15
16.	Guiding and counselling students	3.70	0.57	15	2.50	1.00	17
17.	Dealing with students who cause a lot of trouble in school	3.67	0.60	16.2^1	2.95	0.74	3
18.	Maintaining good relationship with students	3.86	0.36	9	2.01	0.63	20
19.	Attending staff meetings	3.57	0.60	21.3^1	1.43	0.81	24.5^1

Table 4.5 (continued)

No.	Teaching Task	IMPORTANCE Mean	IMPORTANCE SD	IMPORTANCE Rank	DIFFICULTY Mean	DIFFICULTY SD	DIFFICULTY Rank
20.	Communicating effectively with staff members	3.67	0.48	16.2[1]	1.43	0.60	24.5[1]
21.	Working cooperatively with staff members	3.67	0.80	16.2[1]	1.95	0.81	22.5[1]
22.	Communicating with school administrators (e.g. principal and supervisors)	3.76	0.54	12.3[1]	1.95	0.81	22.5[1]
23.	Cooperating with school administrators (e.g. principal and supervisors)	3.90	0.31	8	2.00	0.86	21
24.	Implementing a new programme in the school	3.24	0.54	24	2.81	0.98	10
25.	Adjusting to changes in the school or school system	3.57	0.51	21.3[1]	2.57	0.87	16

[1] denotes tied rank

Analysis on the bases of social characteristics

Further analysis of the data on administrators' perceptions of the importance and difficulty of teaching tasks was undertaken to examine the relationship between these data and administrators' social characteristics. The administrators were grouped on the bases of 4 social categories, namely, highest degree held (less than bachelor; bachelor; and diploma after bachelor, master and doctorate); level of teacher education (grade II, and bachelor of education); administrative experience (1-5 years, 6-10 years, and over 10 years); and school location (urban, and rural). Oneway analysis of variance, and t-test were used, as before, for determining differences between more than one pair of means, and one pair of means, respectively.

Findings. From these analyses it was found that administrators' perceptions of the importance and difficulty of teaching tasks did not differ significantly when grouped according to their level of teacher education and school location. But significant differences were found in their perceptions of the difficulty encountered by their teachers in performing 2 tasks when grouped on the basis of the highest degree held, and 2 tasks when grouped according to their experience.

Highest degree held. The data on Table 4.6 indicate that the mean score (1.67) of administrators with less than a bachelor's degree (group 1) is statistically lower than

Table 4.6

Differences in Mean Scores of Difficulty of Two Teaching Tasks Based on the Highest Degree Held by Administrators

Task no.	Degree group[1]	N	Mean	SD	F	P	Scheffe (P<.1)
11	1	3	1.67	0.58	4.09	0.03	1-3,1-2
	2	12	3.25	0.87			
	3	6	3.12	0.98			
17	1	3	4.00	0.00	9.48	0.00	3-1,3-2, 2-1
	2	12	3.00	0.60			
	3	6	2.33	0.52			

[1] Degree group: 1= Less than bachelor; 2= Bachelor; 3= Diploma after bachelor, Master and Doctorate.

those (3.25, 3.12) of administrators with more than a bachelor's degree (groups 2 and 3) with respect to the difficulty of Task Number 11 - evaluating self performance. Groups 2 and 3 administrators perceived "moderate" difficulty whereas group 1 administrators perceived "low" difficulty in teachers' performance of Task Number 11.

With regard to the difficulty of Task Number 17 - dealing with students who cause a lot of trouble in school - Table 4.6 also shows that the mean scores (4.0, 3.0, and 2.33) of each of the 3 groups differed significantly from the others. The perception of difficulty increased from the group with the lowest degree to the one with the highest degree.

Table 4.7

Differences in Mean Scores of the Difficulty of Two Teaching Tasks Based on the Experience of Administrators

Task no.	Experience group[1]	N	Mean	SD	F	P	Scheffe ($P \leq .1$)
3	1	4	2.75	0.50	2.97	0.08	3-2
	2	6	3.33	0.52			
	3	8	2.38	0.92			
4	1	4	2.25	0.50			1-2
	2	7	3.43	0.53			
	3	8	2.63	0.92			

[1] Experience group: 1= 1-5 years; 2= 6-10 years and 3= over 10 years.

Administrative Experience. According to the data on Table 4.7, the mean score (3.33) of group 2 administrators (those with 6-10 years of experience) is statistically higher than that (2.38) of group 3 administrators (those with Over 10 years of experience) with regard to difficulty of Task Number 3 - planning and preparing lessons. Group 2 administrators also have a statistically higher mean score (3.43) than group 1 administrators, those having 1-5 years of experience, (mean: 2.25) with reference to the difficulty of Task Number 4 - evaluating and selecting teaching materials. In both cases, group 2 administrators perceived "moderate" difficulty while groups 1 and 3 administrators perceived "fairly moderate" or "low" difficulty in teachers' performance of Task Numbers 3 and 4.

Sub-problem 3: How different are teachers' and administrators' perceptions of the importance of the various teaching tasks and the amount of difficulty experienced by teachers in performing these tasks?

This sub-problem was addressed by comparing teachers' and administrators' mean ratings on the importance and difficulty of the 25 teaching tasks. The difference between each pair of means was determined by using the t-test, as before.

Findings. A comparison of teachers' and administrators' mean ratings of the importance of the 25 teaching tasks indicated no significant difference in their perceptions of the importance of these tasks. However, when their mean ratings of teachers' difficulty in performing these tasks were compared, 12 tasks produced significant differences between teachers' and administrators' perceptions (Table 4.8).

Table 4.8

Mean Scores of Tasks which Produced Significant Differences in Teachers' and Administrators' Perceptions of their Difficulty

No.	Teaching Task	Teachers (N=200) Mean	SD	Adminrs. (N=21) Mean	SD	T	P
1.	Developing and maintaining knowledge in the subject area which you teach	2.22	0.93	2.86	0.73	-3.05	0.00
2.	Interpreting the syllabus (curriculum) for your subject area	1.92	0.98	2.48	0.87	-2.51	0.01
3.	Planning and preparing lessons	1.93	0.93	2.74	0.81	-3.65	0.00
4.	Evaluating and selecting teaching materials	2.37	0.99	2.85	0.81	-2.07	0.04
5.	Using various teaching techniques for instruction	2.08	1.02	2.76	1.00	-2.92	0.00
7.	Applying recent educational findings in the classroom	2.45	1.10	3.30	0.66	-5.06	0.00
9.	Constructing, marking and interpreting student examinations	2.42	1.06	2.90	0.89	-2.03	0.04

Table 4.8 (continued)

No.	Teaching Task	Teachers (N=200) Mean	Teachers (N=200) SD	Adminrs. (N=21) Mean	Adminrs. (N=21) SD	T	P
10.	Using instructional time effectively	1.88	0.89	2.85	0.93	-4.58	0.00
11.	Evaluating self performance	2.14	1,06	3.00	1.00	-3.53	0.00
12.	Using available professional literature to help improve your knowledge and competence	2.05	1.00	2.70	0.98	-2.78	0.00
14.	Understanding students' learning problems	2.41	1.03	2.90	0.94	-2.12	0.04
15.	Motivating students	2.06	0.90	2.60	0.94	-2.52	0.01

Table 4.8a

Tasks which both Teachers and Administrators Perceived to be either "Moderate" or "Fairly Moderate" in Difficulty

No.	Teaching Tasks	Teachers (N=200)		Adminrs. (N=21)	
		Mean	SD	Mean	SD
6.	Teaching classes of varied abilities	3.13	1.01	2.91	1.00
7.	Applying recent educational findings in the classroom	2.50	1.10	3.30	0.66
16.	Guiding and counselling students	2.50	1.05	2.50	1.00
17.	Dealing with students who cause alot of trouble in school	3.06	1.05	2.95	0.74
24.	Implementing a new programme in the school	2.76	1.03	2.81	0.98
25.	Adjusting to changes in the school or school system	2.54	1.05	2.57	0.87

The data in Table 4.8 reveal that for all the 12 tasks the mean scores of the administrators were statistically higher than those of the teachers. The differences between the mean scores of teachers and administrators on 6 tasks (nos. 3, 5, 7, 10, 11, and 12) were highly significant. As indicated by the mean scores (see Table 4.1 for mean score categories), administrators perceived that teachers had "moderate" difficulty in performing Task Numbers 7 and 11, "low" difficulty in carrying out Task Number 2, and "fairly moderate" difficulty in executing the remaining 9 tasks. Conversely, teachers perceived "low" difficulty in performing all 12 tasks. Concerning the 12 tasks, 10 (nos. 1 to 5, 7, and 9 to 12) are curriculum and instruction related; and 2 (nos. 14 and 15) are pupil related.

Of the 13 tasks in which no significant differences were observed, both the teachers and the administrators perceived that the teachers had "fairly moderate" or "moderate" difficulty in carrying out the same 6 tasks (Table 4.8a). Two of these tasks (nos. 6 and 7) are curriculum/instruction related; 2 (nos. 16 and 17) are pupil related; and 2 (nos. 24 and 25) are change related.

Summary

This section reported teachers' and administrators' perceptions of the importance and difficulty of 25 teaching tasks. Teachers' and administrators' ratings of the importance of the tasks were generally high. With regard to the difficulty of the tasks, teachers perceived 6 tasks to be either "moderate" or "fairly moderate" in difficulty; while administrators perceived 17 tasks to be either "moderate" or "fairly moderate" in difficulty for their teachers.

There were no significant differences among teacher and administrator sub-groups' perceptions of the importance of the tasks; but few differences occurred in their perceptions of the difficulty of the tasks.

There were no significant differences between teachers' and administrators' perceptions of the importance of the 25 tasks. However, significant differences occurred in their perceptions of the amount of difficulty encountered by teachers in carrying out 11 tasks. Concerning the 11 tasks, the administrators felt that the teachers had either "moderate" or "fairly moderate" difficulty, whereas the teachers felt that they had "low" difficulty in performing them.

AVAILABILITY OF AND PREFERENCE FOR IN-SERVICE OPPORTUNITIES

This section aims at ascertaining the availability of in-service opportunities designed to help teachers overcome their professional difficulties as well as the differences between teachers' and administrators' preferences regarding various in-service opportunities. The same mean score grouping established in the previous section (see Table 4.1) are used in reporting the findings in this section. In the grouping, a mean score of 3.50-4.0 is categorized as "high", 3.0-3.49 is categorized as "moderate", 2.50-2.99 is categorized as "fairly moderate", and 1.0-2.49 is categorized as "low." In-service opportunities for which the respondents display "moderate" or "high" preference are deemed to be the most appropriate for the teachers.

Sub-problem 4: What in-service opportunities for helping teachers overcome their teaching difficulties are currently available?

To obtain information on this sub-problem the respondents were asked to rate, on a four-point rating scale, the degree of availability of 11 in-service opportunities to the teachers. The reference period was January, 1983 to December, 1983.

Findings. The data exhibited in Table 4.9 show the responses of the teachers and administrators on the availability of in-service opportunities. Teachers assigned the highest mean rating (2.21) to the in-service opportunity involving consultation with school system consultants. In-service opportunities involving college or university courses during vacation, and college or university courses during the school year were rated second (mean:2.06) and third (mean:1.90), respectively. The in-service opportunity that involves weekend classes received the lowest mean score of 1.29.

Similarly, administrators gave the highest mean rating (2.38) to the in-service opportunity that involves college or

Table 4.9

Mean Scores and Rank Order of Available In-service Opportunities for Teachers

		AVAILABILITY					
		Teachers (N=200)			Adminrs. (N=21)		
No.	In-service Opportunity	Mean	SD	Rank	Mean	SD	Rank
1.	College or university courses during the school year	1.90	1.12	3	1.95	0.92	6.5[1]
2.	College or university courses during vacation	2.06	1.10	2	2.38	0.92	1
3.	Evening classes	1.46	0.81	8	1.50	0.76	9
4.	Weekend classes	1.29	0.78	11	1.19	0.51	11
5.	Intensive short courses (1 or 2 week duration)	1.39	0.77	10	1.68	0.86	8
6.	One or two days workshop	1.64	0.87	7	2.10	0.94	4
7.	Yearly conferences and conventions	1.73	0.96	6	2.05	1.02	5
8.	Special topic seminars	1.79	0.87	5	1.96	0.74	6.5[1]
9.	Internships	1.41	0.76	9	1.33	0.66	10
10.	Professional books and journals	1.89	0.98	4	2.24	0.89	2.5[1]
11.	Consultation with school system consultants (e.g. department heads and supervising principals)	2.21	1.14	1	2.24	1.09	2.5[1]

[1] denotes tied rank

university courses during vacation. Two in-service opportunities that involve using professional books and journals, and consultation with school system consultants received the second highest rating of 2.24. Again, the lowest mean score (1.19) was given to the opportunity that involves weekend classes.

Overall, the responses from the teachers and administrators were very similar. Both groups perceived "low" availability of in-service opportunities. In addition, they ranked the availability of the opportunities in a very similar order.

Sub-problem 5: What are teachers' and administrators' preferences regarding in-service opportunities for teachers?

To address this sub-problem the respondents were asked to indicate, on a four-point rating scale, the extent to which they preferred each of the 11 in-service opportunities discussed in sub-problem 4. The findings are summarized in Table 4.10.

Findings. The data presented in Table 4.10 reveal that the most preferred in-service opportunity by teachers and administrators was the one involving the use of professional books and journals (means: 3.41 for teachers and 3.57 for administrators). The opportunity of college or university courses during vacation was the second most preferred by both groups (means: 3.30 for teachers, and 3.33 for administrators). College or university courses during the school year (mean: 3.13) was the third most preferred opportunity

Table 4.10

Mean Scores and Rank Order of Preference for In-service Opportunities

		PREFERENCES					
		Teachers (N=200)			Adminrs. (N=21)		
No.	In-service Opportunity	Mean	SD	Rank	Mean	SD	Rank
1.	College or university courses during the school year	3.13	1.15	3	2.91	1.22	6.5[1]
2.	College or university courses during vacation	3.30	1.02	2	3.33	0.86	2
3	Evening classes	2.46	1.24	9	2.50	1.05	9
4.	Weekend classes	2.16	1.21	11	1.52	0.83	11
5.	Intensive short courses (1 or 2 week duration)	2.75	1.08	7	2.81	0.93	8
6.	One or two days workshop	2.68	1.14	8	3.00	1.00	4
7.	Yearly conferences and conventions	2.92	1.12	6	2.91	1.00	6.5[1]
8.	Special topic seminars	2.96	0.98	5	3.05	0.92	3
9.	Internships	2.42	1.14	10	2.25	1.02	10
10.	Professional books and journals	3.41	0.90	1	3.57	0.75	1
11.	Consultation with school system consultants (e.g. department heads and supervising principals)	3.05	0.91	4	2.95	1.00	5

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[1] denotes tied rank

by teachers, while special topic seminars (mean:3.05) was the third most preferred by administrators. The least preferred in-service opportunity by both groups was the one involving weekend classes (mean:2.16 for teachers, and 1.52 for administrators).

Overall, teachers and administrators displayed similar preferences for the 11 in-service oppotunities. Both groups showed "fairly moderate" to "moderate" preference for the same 8 in-service opportunities.

Analyses on the bases of social characteristics

Teachers. Teachers' responses on the availability of and preference for in-service opportunities were further analyzed in order to determine the relationship, if any, between these responses and the social characteristics of teachers. These analyses were based on the 6 social categories (school, highest degree, level of teacher education, experience, major subject taught, and locale) and their subgroups which were outlined in the first section of this chapter. As before, differences between one pair of means were determined by using the t-test, whereas the Oneway analysis of variance and Scheffe procedure were used to determine differences between more than one pair of means.

Findings. The above analyses revealed no significant differences in teachers' perceptions of the availability of and preferences for the in-service opportunities when grouped according to school, highest degree held, years of teaching experience, and the major subject taught. Significant differences were observed only in teachers' preferences for 2 in-service opportunities when grouped on the basis of the level of teacher education received, and for 3 opportunities when grouped on the basis of their school location (Tables 4.11 and 4.12).

Table 4.11

The Relation Between Level of Teacher Education and Teachers' Preferences for Two In-service Opportunities

In-service Opportunity no.	Education group[1]	N	Mean	SD	F	P	Scheffe ($P \leq .1$)
5	1	17	3.00	1.27	4.64	0.00	3-2
	2	72	3.01	1.07			
	3	56	2.41	0.91			
	4	16	2.38	0.96			
6	1	17	2.71	1.16	3.26	0.02	3-2
	2	76	2.93	1.19			
	3	54	2.31	0.99			
	4	16	2.69	1.08			

[1] Education group: 1= None; 2= Teachers' Grade II; 3= Advanced Teachers' Training; and 4= Bachelor of Education

Level of teacher education. The data on Table 4.11 show that the mean score (3.01) of group 2 teachers (those with Teachers' Grade II) statistically differed from that (2.41) of group 3 teachers (those with Advanced Teachers' Training) with respect to their preference for in-service opportunity Number 5 - intensive short courses (1or 2 weeks duration). The mean score (2.93) of group 2 teachers is also statistically higher than that (2.31) of group 3 teachers with regard to their preference for in-service opportunity Number 6 - one or two days workshop. In both cases, the group 2 teachers displayed "moderate" or "fairly moderate" preferences while the group 3 teachers showed "low" preference for the in-service opportunities.

School location. Table 4.12 shows the relationship between locale and teachers' preferences for 3 in-service opportunities. Urban teachers had a statistically lower mean score (2.83) than rural teachers (mean:3.28) with reference to their preference for in-service opportunity Number 1 - college or university courses during the school year. Urban teachers also had a statistically lower mean score (2.67) than their rural counterparts (mean:3.05) in their preference for in-service opportunity Number 7 - yearly conferences and conventions. Finally, the mean score (2.71) of urban teachers statistically differed from that (3.10) of rural teachers with reference to their preferences for in-service opportunity Number 8 - special

Table 4.12

The Relationship Between Locale and Teachers' Preferences for Three In-service Opportunities

In-service Opportunity no.	Locale	N	Mean	SD	T	P
1	Urban	60	2.83	1.24	-2.47	0.00
	Rural	114	3.28	1.08		
7	Urban	61	2.67	1.14	-2.17	0.03
	Rural	116	3.05	1.09		
8	Urban	63	2.71	0.94	-2.51	0.01
	Rural	114	3.10	0.99		

topic seminars. In all three cases, urban teachers exhibited "fairly moderate" preference, whereas rural teachers showed "moderate" preference for the in-service opportunities.

Administrators. Further analyses of administrators' responses on the availability of, and preference for in-service opportunities were based on the 4 social categories (highest degree, level of teacher education, experience, and locale) and their sub-groups which were identified in the first section of this chapter. The t-test and Oneway analysis of variance were used in determining differences between a pair of means and two or more pairs of means, respectively.

Findings. In the above analyses there were no evidence of significant differences in administrators' perceptions of the availability of in-service opportunities. However, significant differences were noticed in administrators' preferences for 1 in-service opportunity when grouped on the basis of highest degree held, 2 opportunities when grouped according to the level of teacher education received, and 2 opportunities when grouped on the basis of their school location.

Highest degree held. As shown in Table 4.13, the mean score (1.33) of group 1 administrators (those with less than a bachelor's degree) and that (2.27) of group 2 administrators (those with a bachelor's degree) are statistically lower than that (3.50) of group 3 administrators (those with diploma after bachelor, Master's or doctorate degree) with regard to their preference for in-service opportunity Number 3 - evening classes. Group 1 and 2 administrators showed "low" preference while group 3 administrators showed "high" preference for this in-service opportunity for their teachers.

Table 4.13

The Relationship Between Highest Degree Held and Administrators' Preference for One In-service Opportunity

In-service Opportunity no.	Degree group[1]	N	Mean	SD	F	P	Scheffe (P≤.1)
1.	1	3	1.33	0.58	8.75	0.00	1-3,2-3
	2	11	2.27	0.79			
	3	6	3.50	0.84			

[1] Degree group: 1= Less than bachelor; 2= bachelor; 3= Diploma after bachelor, master and doctorate.

Level of teacher education. The data shown in Table 4.14 indicate that there is a statistical difference between the mean score (2.40) of group 1 administrators (those with Teachers' Grade II) and that (3.50) of group 2 administrators (those with bachelor of education degree) in their preference for in-service opportunity Number 6 - one or two days workshop. Likewise, there is a significant difference between the mean score (2.70) of group 1 administrators and that (3.67) of group 2 administrators with regard to their preference for in-service opportunity Number 7 - yearly conferences and conventions. Group 1 administrators displayed "low" preference for opportunity Number 6 and "fairly moderate" preference for opportunity Number 7. Group 2 administrators showed "high" preference for both opportunities for their teachers.

Table 4.14

The Relationship Between Level of Teacher Education and Administrators' Preferences for Two In-service Opportunities

In-service Opportunity no.	Education group[1]	N	Mean	SD	T	P
6	1	10	2.40	0.97	-2.53	0.02
	2	6	3.50	0.55		
7	1	10	2.70	0.95	-2.28	0.04
	2	6	3.67	0.52		

[1] Education group: 1= Teachers' Grade II; and
2= Bachelor of Education.

Administrative experience. Table 4.15 exhibits the relationship between administrative experience and preference for 2 in-service opportunities. The mean score (4.0) of group 1 administrators (those with 1-5 years of experience) fell in the "high" category, whereas that (2.29) of group 2

Table 4.15

The Relationship Between Experience and Administrators' Preferences for Two In-service Opportunities

In-service Opportunity no.	Experience group[1]	N	Mean	SD	F	P	Scheffe ($P \leq .1$)
7	1	4	4.00	0.00	5.16	0.02	2-1
	2	7	2.29	0.76			
	3	9	2.89	1.05			
9	1	4	2.75	0.50	5.16	0.02	2-1, 2-3
	2	7	1.43	0.53			
	3	8	2.75	1.17			

[1] Experience group: 1= 1-5 years; 2= 6-10 years and 3= over 10 years.

administrators (those with 6-10 years of experience) fell in the "low" category with respect to their preference for in-service opportunity Number 7 - yearly conferences and conventions. The difference between the mean score (1.43) of group 2 administrators and that (2.75) of groups 1 and 3 administrators, in their preference for in-service opportunity Number 9 - internships, is significant. Groups 1 and 3 administrators exhibited "fairly moderate" preference whereas group 2 administrators showed "low" preference for in-service opportunity Number 9.

Sub-problem 6: How different are teachers' and administrators' preferences for in-service opportunities for teachers?

This sub-problem was addressed by comparing teachers' and administrators' mean ratings of their preferences for the 11 in-service opportunities. The t-test was used, as before, to determine the difference between each pair of means.

Findings. The above analysis revealed no significant difference between teachers' and administrators' preferences for any of the 11 in-service opportunities. Teachers and administrators exhibited similar preferences for the various opportunities.

Summary

The foregoing section presented teachers' and administrator's indications of available in-service opportunities for teachers, and their preferences for them. Both groups indicated low availability of the 11 in-service opportunities identified. Also, they ranked the availability of the opportunities in a similar order. The four most available opportunities were consultation with school system consultants, college or university courses during vacation or school year, and professional books and journals.

The teachers and the administrators exhibited "fairly moderate" to "moderate" preferences for the same 8 in-service opportunities. For both groups, professional books and journals, and college or university courses during the vacation period were the first and second most preferred in-service opportunities, respectively.

A comparison of teachers' and administrators' preferences for the 11 in-service opportunities revealed no significant differences.

PREFERENCES ON SOME ASPECTS OF IN-SERVICE EDUCATION

The object of this section is two-fold. One is to determine teachers' and administrators' preferences regarding five in-service education issues, namely, financing, planning, timing, methods of delivery, and incentives for teacher participation. Another is to determine if there are any differences between teachers' and administrators' preferences on these issues. The respondents' ranking of the various views on these issues was used as a basis for determining their preferences on these issues as well as for encouraging current practices or recommending alternative ones.

Sub-problem 7: What are teachers' and administrators' preferences on the in-service issues of financing, planning, timing, delivery methods, and incentives for teacher participation?

Information on this sub-problem was obtained by asking the respondents to rank, in the order of their preferences, the various ways in which the 5 issues could be addressed. One (1) was used to indicate the highest rank. The specific question and the responses to each issue are presented below.

Issue 1: Responsibility for Financing Local In-service Programme

The respondents were asked to rank, in the order of their preference, 5 agences that could be responsible for financing local in-service programme.

Findings. The data presented in Table 4.16 show that teachers and administrators ranked the agencies in an identical order. The Ministry of Education was ranked first, while the Zonal Education Board, and Local Teachers Union were ranked second and third, respectively. "Individual teachers"received the fifth and last rank.

Differences between teachers' and administrators' responses

The t-test was administered to teachers' and administrators' responses on Issue 1 so as to determine differences in the responses of the two groups. This analysis revealed no significant differences in the mean scores assigned to the agencies by both groups. Thus, indicating no differences in the perceptions of the two groups on who should fund in-service activities.

Table 4.16

Mean Scores[1] and Rank Order of Teachers' and Administrators' Preferences Regarding the Financing of In-service Programme

		PREFERENCE					
		Teachers (N=200)			Administrators (N=21)		
No.	Agency	Mean	SD	Rank	Mean	SD	Rank
1.	Local Teachers' Union	3.26	0.66	3	3.63	0.96	3
2.	Zonal Education Board	1.85	0.53	2	2.18	0.40	2
3.	Ministry of Education	1.19	0.54	1	1.05	0.24	1
4.	Individual teachers	4.68	0.85	5	4.75	0.57	5
5.	Individual schools	3.98	0.80	4	3.69	1.08	4

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[1] A smaller mean indicates a higher preference.

Administrators. The responses of the administrators on Issue 1 were subjected to more analyses based on the 4 social categories (highest degree, level of teacher education, experience, and locale) and their sub-groups which were outlined in the first section of this chapter. As before, the t-test and Oneway analysis of variance were used in determining differences between one pair of means, and two or more pairs of means, respectively. The above procedure was repeated for the administrators in the remaining 4 issues.

Findings. The above analyses yielded no significant differences in administrators' responses except in one instance when they were grouped on the basis of their experience.

Administrative experience. The data in Table 4.18 indicates that group 1 administrators (those with 1-5 years of experience, mean:2.75) showed a higher preference for in-service funding agency Number 1 - local Teachers' Union - than group 3 administrators (those with over 10 years of experience, mean:4.20). The difference between the mean scores is statistically significant.

Table 4.18

The Relationship Between Experience and Administrators' Preference for One In-service Funding Agency

Agency no.	Experience group[1]	N	Mean[2]	SD	F	P	Scheffe ($P<.1$)
1.	1	4	2.75	0.50	3.54	0.06	3-1
	2	6	3.83	0.98			
	3	5	4.20	0.84			

[1] Experience group: 1=1-5 years; 2=6-10 years and 3=Over 10 years.

[2] A smaller mean indicates a higher preference.

Issue 2: Responsibility for Planning and Organising Local In-service Programme

In this case the respondents were asked to rank, in the order of their preference, 6 agencies that could be responsible for planning and organising local in-service programme.

Findings. The data exhibited in Table 4.19 reveal that teachers and administrators ranked the agencies in an identical order. Both groups ranked the Ministry of Education first, and ranked the Zonal Education Board, and Universities

Table 4.19

Mean Scores[1] and Rank Order of Teachers' and Administrators' Preference Regarding the Planning and Organising of In-service Programme

		PREFERENCE					
		Teachers (N=200)			Administrators (N=21)		
No.	Agency	Mean	SD	Rank	Mean	SD	Rank
1.	Local Teachers' Union	3.84	1.14	4	3.81	0.54	4
2.	Zonal Education Board	2.16	0.98	2	2.44	0.73	2
3.	Ministry of Education	1.54	0.94	1	1.30	0.47	1
4.	University and Teacher Training Colleges	2.64	1.48	3	2.50	1.27	3
5.	Teachers themselves	5.19	1.06	6	5.62	0.50	6
6.	Individual schools	4.98	1.10	5	5.25	0.68	5

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[1] A smaller mean indicates a higher preference.

and Teacher Training Colleges second and third, respectively. The last rank was given to "teachers themselves."

Differences between teachers' and administrators' responses.

A comparison of teachers' and administrators' responses on Issue 2 (using the t-test) yielded no significant differences in the mean scores given to the agencies by both groups. This is an indication of similar perceptions by the two groups on who should plan and organise in-service activities.

Analyses on the bases of social characteristics

Teachers. As before, the responses of teachers on Issue 2 were further analysed on the bases of the 6 social categories identified previously.

Findings. The above analyses did not reveal any significant difference in teachers' responses on Issue 2. This suggests a strong agreement among the teachers on who should plan and organise local in-service programme.

Administrators. The responses of the administrators on Issue 2 were also subjected to more analyses based on the 4 social characteristics outlined earlier.

Findings. Again, these analyses did not yield significant differences in administrators' responses on Issue 2. This also indicates a strong agreement among the administrators on who should plan and organise local in-service programme.

Issue 3: Timing of In-service Sessions

On this issue the respondents were asked to rank, in the order of their preference, 4 time periods in which in-service sessions could be held.

Findings. As evident in Table 4.20, teachers and administrators ranked the four different time periods in a similar order. Both groups assigned the first rank to "vacation periods," and the second rank to "weekends." However, teachers ranked "school hours" and "evening hours" third and fourth, respectively. Conversely, administrators ranked them fourth and third, respectively.

Further analyses

More analyses (using the t-test) to compare teachers' and administrators' responses on Issue 3 disclosed no significant differences between the mean scores assigned to the various time periods by both groups.

In addition, analyses comparing the responses on the bases of the respondents' social characteristics produced no significant differences. These results seem to suggest that teachers and administrators share a similar view on when in-service sessions should be held.

Issue 4: In-service Delivery Methods

On this issue the respondents were asked to rank, in the order of their preference, 4 methods through which in-service courses could be presented.

Table 4.20

Mean Scores[1] and Rank Order of Teachers' and Administrators' Preferences Regarding the Timing of In-service Activities

		PREFERENCE					
		Teachers (N=200)			Administrators (N=21)		
No.	Period	Mean	SD	Rank	Mean	SD	Rank
1.	School hours	3.61	0.92	3	3.94	0.44	4
2.	Evening hours	2.86	0.55	4	2.69	0.60	3
3.	Weekends	2.26	0.59	2	2.56	0.73	2
4.	Vacation periods	1.03	0.18	1	1.05	0.22	1

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[1] A smaller mean indicates a higher preference.

Findings. The data in Table 4.21 show that teachers and administrators ranked 3 of the four in-service delivery methods in a different order. Teachers assigned the first rank to "formal lectures with opportunity for questions," but administrators assigned the third rank to it. "Seminars with opportunity for questions and discussion" was ranked second by teachers, but was ranked first by administrators. "Workshops with practice in simulated or classroom setting" received third and second rankings from teachers and administrators, respectively. Both groups ranked "special radio or television programme" fourth and last.

Differences between teachers and administrators' responses

A comparison of teachers' and administrators' responses (using the t-test) on Issue 4 revealed some differences in their responses to 2 in-service delivery methods. As shown in Table 4.22 teachers (mean:1.61) showed a higher preference for "formal lectures with opportunity for questions" than administrators (mean:2.50). The different between the mean scores is statistically significant.

Conversely, administrators (mean:1.61) displayed a higher preference for "seminars with opportunity for questions and discussions" than teachers (mean:2.81). There is a significant difference between the mean scores of the two groups.

Table 4.21

Mean Scores[1] and Rank Order of Teachers' and Administrators' Preference Regarding In-service Delivery Methods

		PREFERENCE					
		Teachers (N=200)			Administrators (N=21)		
No.	Delivery Method	Mean	SD	Rank	Mean	SD	Rank
1.	Formal lectures with opportunity for questions	1.61	0.93	1	2.50	0.82	3
2.	Seminars with opportunity for questions and discussions	2.08	0.84	2	1.61	0.98	1
3.	Workshops with practice in simulated or classroom setting	2.18	0.96	3	2.18	1.07	2
4.	Special radio or television programme for teachers	3.63	0.79	4	3.81	0.40	4

[1] A smaller mean indicates a higher preference.

Table 4.22

Differences in Teachers' and Administrators'
Preferences for Two In-service
Delivery Methods

No.	In-service delivery method	Teachers (N=200)		Adminrs. (N=21)		T	P
		Mean[1]	SD	Mean	SD		
1.	Formal lectures with opportunity for questions	1.61	0.93	2.50	0.82	-3.72	0.00
2.	Seminars with opportunity for questions and discussions	2.08	0.84	1.61	0.98	2.18	0.03

[1] A smaller mean indicates a higher preference.

Analyses on the bases of social characteristics

Teachers. Teachers' responses on Issue 4 were further analysed on the bases of the 6 social categories outlined previously in this chapter.

Findings. In the above analyses, significant differences were observed in teachers' responses on 2 in-service delivery methods when grouped on the basis of the major subject taught; and on 1 delivery method when grouped according to their locale.

Major subject taught. The data in Table 4.23 indicate that group 1 teachers (those that taught language arts, mean: 1.84) exhibited a higher preference for in-service delivery method Number 2 - seminars with opportunity for questions and discussions - than group 2 teachers (those that taught mathematics, mean: 2.57). The difference between the mean scores of the two groups is statistically significant.

Table 4.23 also shows that the group 1 teachers (mean: 2.39) displayed a lower preference for in-service delivery method Number 3 - workshops with practice in simulated or classroom setting - than group 3 teachers (those that taught science, mean: 1.79). The mean scores of the two groups differ significantly.

Table 4.23

The Relationship Between the Major Subject Taught and Teachers' Preference for Two In-service Delivery Methods

Delivery method no.	Major subject group[1]	N	Mean[2]	SD	F	P	Scheffe ($P < .1$)
2	1	45	1.84	0.90	3.51	0.02	2-1
	2	14	2.57	0.65			
	3	34	2.09	0.79			
	4	29	2.28	0.75			
3	1	36	2.39	0.90	2.73	0.05	1-3
	2	14	2.07	0.92			
	3	34	1.79	0.88			
	4	32	2.28	0.99			

[1] Major subject group: 1= Language Arts; 2= Mathematics; 3= Science; and 4= Social Studies.

[2] A smaller mean indicates a higher preference.

School location. As exhibited in Table 4.24, urban teachers (mean: 1.84) showed a lower preference for in-service delivery method Number 1 - formal lectures with opportunity for questions - than rural teachers (mean: 1.46). There is a significant difference between the means scores of the two groups.

Table 4.24

The Relationship Between Locale and Teachers' Preference for One In-service Delivery Method

Delivery method no.	Locale	N	Mean[1]	SD	T	P
1.	Urban	62	1.84	1.07	2.40	0.02
	Rural	100	1.46	0.80		

[1] A smaller mean indicates a higher preference.

Administrators. The administrators' responses on Issue 4 were also analysed on the bases of the 4 social categories identified earlier in this chapter.

Findings. The above analyses revealed a significant difference in administrators' responses on one in-service delivery method when grouped on the basis of their experiences.

Administrative experience. As evident in Table 4.25, the mean score (3.00) of group 2 administrators (those with 6-10 years of experience) is statistically different from that (1.67) of group 3 administrators (those with over 10 years of experience) with regard to their preference for in-service delivery method Number 3 - workshops with practice in simulated or classroom setting.

Table 4.25

The Relationship Between Experience and Administrators' Preference for One In-service Delivery Method

Delivery method no.	Experience group[1]	N	Mean[2]	SD	F	P	Scheffe ($P \leq .1$)
3	1	4	2.00	0.82	3.25	0.71	2-3
	2	6	3.00	1.10			
	3	6	1.67	0.82			

[1] Experience group: 1= 1-5 years; 2= 6-10 years; and 3= over 10 years.

[2] A smaller mean indicates a higher preference.

Issue 5: Incentives for Teachers' Participation in In-service Activities

On this issue the respondents were asked to rank, in the order of their preference, 5 incentives for motivating teachers to participate in in-service activities.

Findings: Table 4.26 reveals that teachers and administrators ranked the incentives in an identical order. The two groups assigned the first rank to "offering in-service courses that lead to a higher qualification or promotion;" and gave the second rank to "not requiring teachers to pay for in-service programmes." Involving more teachers

Table 4.26

Mean[1] Scores and Rank Order of Teachers' and Administrators' Preferences on Incentives for Teachers' Participation in In-service Activities

		PREFERENCE					
		Teachers(N=200)			Adminrs.(N=21)		
No.	Incentives	Mean	SD	Rank	Mean	SD	Rank
1.	Involving more teachers in planning in-service activities	3.79	1.24	5	4.00	0.89	5
2.	Offering in-service courses that lead to higher qualification or promotion	1.43	0.94	1	1.67	1.24	1
3.	Paying teachers extra salary for attending in-service activities that last longer than regular school hours	3.00	1.36	3	2.77	1.39	3
4.	Not requiring teachers to pay for in-service programmes	2.57	1.19	2	2.63	1.26	2
5.	Offering in-service activities that have direct application to the classroom	3.38	1.35	4	3.75	1.25	4

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[1] A smaller mean indicates a higher Preference.

in planning in-service activities" was ranked fifth and last by both groups.

Further analysis

Additional analysis (using the t-test) to compare teachers' and administrators' responses on Issue 5 yielded no significant differences between the mean scores assigned to the various incentives by both groups.

Analyses on the bases of social characteristics

Teachers. The responses of teachers on Issue 5 were analysed on the bases of the 6 social categories identified earlier in this chapter.

Findings. In the above analyses, a significant difference was found in teachers' responses on 1 incentive when they were grouped on the basis of their school location.

School location. The data in Table 4.27 indicate that urban teachers (mean: 3.30) showed a much lower preference for incentive Number 3 - paying teachers extra salary for attending in-service activities that last longer than regular school hours - than rural teachers (mean: 2.77). The difference between the mean scores is statistically significant.

Table 4.27

The Relationship Between Locale and Teachers' Preference for One Incentive for Teachers' Participation in In-service Activities

Incentive no.	Locale	N	Mean[1]	SD	T	P
3	Urban	56	3.30	1.37	2.26	0.03
	Rural	73	2.77	1.31		

[1] A smaller mean indicates a higher preference.

Administrators. The responses of administrators on Issue 5 were also analysed on the basis of the 4 social categories outlined previously in this chapter.

Findings. The above analyses revealed a significant difference in administrators' responses on one in-service incentive when they were grouped according to their school location.

School location. As evident in Table 4.28 urban administrators (mean: 1.60) displayed a much higher preference for incentive Number 4 - not requiring teachers to pay for in-service programmes - than did their rural counter parts (mean:3.09). The mean scores for the two groups differ significantly.

Table 4.28

The Relationship Between Locale and Administrators' Preference for One Incentive for Teachers' Participation in In-service Activities

Incentive no.	Locale	N	Mean[1]	SD	T	P
4	Urban	5	1.60	0.89	-2.58	0.02
	Rural	11	3.09	1.14		

[1] A smaller mean indicates a higher preference.

Summary

The findings reported in this section indicate that there were no significant differences between teachers' and administrators' preferences regarding in-service financing, planning and organisaing, timing, and incentives for teachers' participation. Both groups of respondents felt that the State Ministry of Education should be primarily responsible for financing, planning and organising in-service education of teachers. Also, they indicated that the most appropriate time for in-service session was during vacation periods, and that the greatest incentive for teachers to participate in in-service activities was to offer them courses that lead to higher qualification or promotion.

However, teachers and administrators differed in their preferences for in-service delivery methods - the formal lecture format was the most preferred by teachers, while the seminar format was the most preferred by administrators.

PRESENTATION OF INTERVIEW DATA

One purpose of the interview was to collect contextual information (educational preparation of teachers and administrators, current in-service practices, and social condition) about Aba school system and community area. The first section of the interview guide was designed to accomplish this purpose; and the information obtained was presented in chapter 1 under the heading "The Context of the Study."

Another purpose of the interview was to ascertain the reasons for the initial responses to Section 4 of the questionnaire which delt with the in-service issues of funding, planning, timing, delivery methods, and incentives for teachers' participation. In the second section of the interview guide, therefore, the interviewees (21 teachers and 7 administrators) were asked to elaborate briefly on their responses to each of these 5 issues. A summary of the information obtained for each issue if presented below.

Issue 1: Responsibility for Financing Local In-service Programme

Most of the teacher and administrator interviewees felt that the State Ministry of Education should be primarily responsible for financing local in-service education programme. By far, the most often cited reason for this opinion was that the Ministry of Education was in the best financial position, compared with the other agencies, to pay for the operation of in-service education programmes. The interviewees also pointed out that even if the Ministry of Education did not have the funds, it was in the best position to influence the government so that the funds could be made available. Most of the interviewees also felt that the Zonal Education Board and the Local Teachers' Union should contribute in financing in-service activities, but not teachers. They contended that asking teachers to contribute to in-service funding was a negative in-service incentive for teachers. However, they also felt that teachers may be required to assist in funding in-service activities only if such activities will lead to a higher qualification or promotion. At present, the small amount of money allotted for in-service education comes from the Ministry of Education.

Issue 2: Responsibility for Planning and Organising Local In-service Programme

Both the teachers and the administrators had identical responses and the same kind of justification for their responses on Issue 2. First, they pointed out that in-service education programmes and activities were, for the most part, State-wide affairs. In view of this, most of the interviewees were of the opinion that the State Ministry of Education should be primarily responsible for planning and organising the local in-service programme, followed by the Zonal Education Board, and the Universities and Teacher Training Colleges. A significant number of the interviewees justified their responses from the notion that these agencies had the human resources as well as the facilities necessary for planning and organising an effective in-service programme. They believed that teachers should be involved in identifying in-service needs, but planning, organising and delivery should be left to competent in-service personnel of these three agencies. Further, they argued that teachers and individual schools could not plan and organise in-service activities because they lack not only the knowledge and skill but also the time. Presently, the common practice is for the Ministry of Education to determine in-service needs of teachers and then order the Zonal Education Board to plan, organise and deliver activities to meet those needs.

Issue 3: Timing of In-service Sessions

Almost all the teachers and administrators indicated that the vacation period was the most appropriate time for in-service activities. Most of the interviewees believed that this was the period when most of the teachers were under minimum pressure from other school activities. As such, it was the period when the teachers had more time, strength and, therefore, motivation to attend in-service activities. They felt that an in-service activity may be conducted during the weekend or school hours only if such activity could not be successfully held during the vacation period. At present, in-service activities are conducted during vacation periods and school hours.

Issue 4: In-service Delivery Methods

In Aba school system, as in other school systems in Imo State, in-service courses are always presented in the form of a seminar or workshop. However, a substantial number of teacher interviewees preferred the presentation of in-service courses in the form of formal lectures to seminars or workshop. The reason given for this preference was that seminar and workshop courses always appeared to be poorly organised and executed, whereas formal lecture courses were always informative and worthwhile. In contrast, the administrator interviewees preferred seminar and workshop to the formal lecture format. They felt that the former methods gave teachers more practical experience than did the latter.

Issue 5: Incentives for Teachers' Participation in In-service Activities

Both teacher and administrator interviewees indicated very strongly that offering in-service courses that led to higher qualification or promotion was, by far, the greatest incentive for teachers to actively participate in in-service activities. One justification for this belief was that higher qualification or promotion provided teachers higher salaries as well as higher status. Also, the interviewees were of the opinion that in-service courses that led to higher qualification or promotion will, by and large, have relevant application to the classroom. Presently, secondary school teachers in Aba school system, like their counterparts throughout Imo State, are not offered in-service courses that lead to higher qualification or promotion.

Other Comments

Most of the interviewees made comments regarding the in-service education of teachers as a whole. Many teachers indicated their willingness to cooperate with school administrators in matters relating to the in-service education of teachers. Especially, they indicated their willingness to attend in-service activities that are designed to help them overcome their professional difficulties. Both teachers and administrators commented that there is an urgent need for in-service education, especially for unqualified and untrained teachers. They noted that without an adequate in-service programme teaching standard will continue to fall. Finally, they pointed out that the major obstacle to an effective in-service education programme for teachers was the lack of willingness on the part of the Ministry of Education to provide funds and facilities for the programme. To overcome this obstacle, they suggested that the universities and teacher training colleges be asked to offer in-service courses to teachers during long vacation periods. This approach, they believed, would reduce the physical and human costs of in-service education, making it more bearable for the government. This would, in turn, make the government more willing to finance in-service programmes.

Summary

This section reported the information obtained from 21 teachers and 7 administrators who were interviewed in order to ascertain the reasons behind their initial responses to Section 4 of the questionnire. Most of the interviewees felt that the State Ministry of Education should have the primary responsibility for financing, planning and organising in-service education for teachers because this agency is in the best position to secure and allot funds and facilities for in-service programmes.

The interviewees were of the opinion that the vacation period was the most appropriate time for in-service activities because it was the time when most teachers were free from other school activities. Because professional advancement leads to higher salary and higher status, they also believed that the greatest incentive for teachers to participate in in-service activities was to offer them courses that led to higher qualification or promotion.

Most of the teachers preferred the formal lecture method of delivery on the ground that it was more effective, while the administrators preferred seminars and workshops for the reason that they were more practical.

Both teacher and administrator interviewees commented that there was an urgent need for in-service education especially for untrained and unqualified teachers. They felt that lack of financial support from the government was the major obstacle to establishing an effective in-service education programme.

SUMMARY

In this chapter the findings of the study were presented and analyzed. A summary of these findings and analyses is presented in this section as follows:

Importance and difficulty of teaching tasks

Overall, the respondents' perceptions of the importance of the 25 teaching tasks were "high." Teachers and administrators rated 19 and 23 tasks, respectively, as high with regard to their importance. With regard to the difficulty of the teaching tasks, teachers perceived 2 tasks to be "moderate" and 4 tasks to be "fairly moderate" in difficulty. In contrast the administrators perceived 2 tasks to be "moderate" and 15 tasks to be "fairly moderate" in difficulty.

Further, when teachers' and administrators' ratings of the importance and difficulty of the teaching tasks were compared, using the t-test, it was found that administrators' mean ratings of the difficulty of 12 tasks were significantly higher than those of teachers. However, both groups indicated that the teachers had considerable difficulty in performing the same 6 tasks. Few significant differences were observed among teacher and administrator sub-groups' ratings of the importance and difficulty of the tasks.

Availability of and preferences for in-service opportunities

The teachers and administrators indicated "low" availability of the 11 in-service opportunities which were identified. Both groups assigned the highest mean ratings to consultation with school system consultants, college and university courses during vacation or school year, and professional books and journals, with regard to their availability.

Both the teachers and administrators also displayed "fairly moderate" to "moderate" preferences for the same 8 in-service opportunities. For the two groups, professional books and journals, college or university courses during vacation were the first and second most preferred opportunities, respectively. There were no significant differences between either teachers and administrators or among their sub-groups in their preferences for the 11 in-service opportunities.

Preferences on some aspects of in-service education

There were no significant differences between teachers' and administrators' preferences on the in-service issues of financing, planning, timing, and incentives for teachers' participation. Both groups strongly indicated that the State Ministry of Education should have the primary responsibility for financing, planning and organising of teachers' in-service educational programme because of its advantageous position in obtaining and allocating educational funds and facilities. They also felt that vacation period was the most appropriate time for holding in-service activities since most of the teachers were free from other school activities during this period.

Further, the respondents believed that offering in-service courses that lead to higher qualification or promotion was the best incentive for teachers to actively participate in in-service programmes. The reason given for this was that higher qualification or promotion leads to higher salary and status.

Teachers and administrators differed significantly in their preferences for in-service delivery methods. The formal lecture format was the most preferred method by teachers. Most administrators preferred seminars for the reason that they were more practical.

In addition to the above findings, the respondents commented that in-service education, especially for unqualified and untrained teachers, was an urgent need. In their view, the major obstacle facing in-service education was lack of funds and facilities from the government.

CHAPTER 5

DISCUSSION OF FINDINGS

The problem for this study was to determine the discrepancies that exist between teachers' and administrators' perceptions of teachers' in-service needs, and preferences for meeting those needs. To accomplish this, information was sought on nine sub-problems relating to:

1. teachers' perceptions of the importance and difficulty of various teaching tasks;
2. administrators' perceptions of the importance and difficulty of various teaching tasks;
3. differences between teachers' and administrators' perceptions regarding the importance and difficulty of teaching tasks;
4. available in-service opportunities for helping teachers overcome their teaching difficulties;
5. teachers' and administrators' preferences regarding in-service opportunities for teachers;
6. differences between teachers' and administrators' preferences on in-service opportunities for teachers;
7. teachers' and administrators' preferences on the in-service issues of planning, delivery methods, timing, funding, and incentives for teacher participation;

8. differences between teachers' and administrators' preferences on in-service planning, delivery methods, timing, funding, and incentives for teacher participation; and
9. the relationship between perceived teachers' in-service needs and preferences and some personal characteristics of the respondents.

The findings on these sub-problems were presented in chapter 4. In this chapter, those findings are discussed in three sections. The first section discusses the findings on teachers' and administrators' perceptions of teachers' in-service needs. The findings on availability of and preference for in-service opportunities are discussed in the second section; and discussions on the respondents' preferences on in-service financing, planning and organising, timing, delivery method, and incentives for teacher participation are presented in the third section.

A summary of the discussions is presented at the end of this chapter.

Perceived In-service Needs of Teachers

Teachers' and administrators' perceived in-service needs of teachers were derived from their perceptions of the importance and difficulty of 25 teaching tasks.
Tasks which the respondents or their sub-groups perceived to

be "fairly moderate" (mean:2.50-2.99), "moderate" (mean:3.0-3.49), or "high" (mean:3.50-4.0) - Table 4.1 - with regard to their difficulty are deemed to be potential in-service need areas.

The data exhibited in Tables 4.2 and 4.5 show that, on the whole, the 25 teaching tasks received "high" ratings, with regard to their importance, from the respondents - 19 and 23 tasks were rated "high" by teachers and administrators, respectively; and no task was rated low. Further, a comparison of teachers' and administrators' ratings of the importance of these tasks revealed no significant differences. Similarly, no significant differences were observed among the sub-groups (highest degree held, level of teacher education, years of experience, major subject taught, and school location) of teachers and administrators. These findings strongly suggest that there was an agreement among the respondents with regard to the importance of the 25 teaching tasks.

With regard to the amount of difficulty which teachers experienced in carrying out the 25 tasks, both respondent groups perceived that the teachers had "fairly moderate" or "moderate" difficulty in performing the same 6 tasks (Table 4. 8a). The absence of significant differences between teachers' and administrators' ratings of these 6 tasks suggest that both groups agreed that teachers had considerable difficulty in executing them. These tasks fell in the category (mean:2.50 or more) deemed to be potential in-service need area.

The evidence of in-service needs in tasks relating to applying recent educational findings in the classroom, guiding and counselling students, and implementing a new programme in the school (Table 4.8a) support the research findings of Burke (1980), Hawes and Ozigi (1975), and Staples (1970), respectively, in which teachers expressed need for in-service education in these task areas.

Besides the 6 tasks indicated above, there were 11 other tasks (Table 4.8, excluding task no. 2) in which the administrators also felt that the teachers had "fairly moderate" or "moderate" difficulty, but in which the teachers indicated having low difficulty. A comparison of the two groups' mean ratings of the difficulty of the 25 tasks revealed that the administrators' ratings of these 11 tasks were significantly higher than those of the teachers - Table 4.8. This finding indicates that there are some discrepancies between the teachers' and the administrators' perceptions of the amount of difficulty encountered by the teachers in performing certain tasks which both groups regard as important. The fact that the 11 tasks in which differences occurred fell in the category considered as potential in-service need area (mean: 2.50 or more) could be regarded as an evidence of differences in teachers' and administrators' perceived in-service needs of teachers. This finding confirms those of Schreiber (1975), Burke (1980), Echevarria (1981), and

Pansegrau (1983) that significant differences exist between teachers' and administrators' perceptions of the in-service needs of teachers.

The differences in teachers' and administrators' perceptions of teachers' in-service needs observed in this study become very important in the light of the fact that 9 of the 11 tasks in which significant differences existed are among the 12 tasks which are related to curriculum and instruction. In view of the extensive differences between the two groups in this most important area of teachers' responsibility, the question might be asked: whose perception is more real - the teachers or the administrators? The information obtained from the interview favours the latter case. In the interview, both the teachers and the administrators commented that there was an urgent need for in-service education to arrest the continuing decline in instructional standard which started in the late seventies. This observation seems to substantiate the administrators' view that the teachers have considerable difficulty in executing instructional tasks. It could, therefore, be taken as a supportive evidence of the in-service education needs of the teachers in the task areas of curriculum and instruction.

The remaining 2 tasks - understanding students' learning problems, and motivating students (Table 4.8) in which significant differences existed between the teachers and the administrators are among the 6 tasks described as pupil related. In view of the close link between these tasks and the 9 curriculum/ instruction tasks discussed above, it is conceivable that the inferences made on those 9 tasks will be applicable here. Thus, it may also be concluded that there is a need for in-service education of the teachers in tasks relating to understanding students' learning problems, and motivating the students.

Although many differences were observed between teachers' and administrators' perceptions regarding the amount of difficulty experienced by teachers in performing their tasks, very few differences existed among teacher and administrator sub-groups. Of a possible 675 pairs of means compared among teacher sub-groups of highest degree held, level of teacher education, teaching experience, subject taught, and locale, only 6 pairs differed significantly (Tables 4.3 and 4.4). In other words, 669 of 675 pairs of means were not significantly different. Similarly, of a possible 250 pairs of means compared among administrator sub-groups of highest degree held, level of teacher education, administrative experience, and locale, only 7 pairs were significantly different (Tables 4.6 and 4.7). Thus, 243 of 250 pairs of means did not differ significantly. From these findings, it may be inferred that, in general, there was a consensus among the teachers, as well as the administrators, with regard to the in-service needs of the teachers. The existence of few differences among teacher sub-groups is consistent with the findings of El-Mehdiwi's (1977) study in which the teacher sub-groups showed no differences in their perceived needs for in-service education.

In view of the foregoing findings, and of the evidence presented earlier which indicates that the teachers need in-service education in some task areas, it seems appropriate to conclude that the need for in-service education in Aba secondary school system is not limited to any sub-group of teachers. Teachers from the various sub-groups will benefit from in-service activities that address their needs.

In summary, the findings and discussions presented in this section suggest that the respondents perceived that the teachers need in-service education to help them overcome the difficulties which they have in performing certain tasks. Also, there is substaintial evidence of differences between teachers' and administrators' perceived in-service needs of teachers, especially in tasks related to curriculum and instruction. Respondents' sub-groups showed few differences in their perceived in-service needs of teachers.

Availability of and Preferences for In-service Opportunities

Sub-problem 4 yielded data on the in-service opportunities that are available to secondary school teachers in Aba school system. As shown in Table 4.9, all of the 11 in-service opportunities which were identified were perceived to be "low" (mean: less than 2.50) in availability by both teacher and administrator respondents. In addition, both groups of respondents ranked the opportunities in a similar order with regard to their availability. Information obtained from the interview substantiates these findings. In their comments on teachers in-service practices, both teacher and administrator interviewees pointed out that about three in-service activities were available in a given year and less than 5 percent of the teachers had the opportunity to attend.

At least three conclusions could be drawn from the above evidence. First, the teachers and the administrators had very similar perceptions regarding the availability of in-service opportunities to the teachers. Second, very few in-service opportunities are available to the teachers. Finally, in the previous section it was established that the teachers need in-service education to help them overcome the difficulties which they have in performing many of their professional tasks. In view of this, it is concluded that the current level of availability of in-service opportunities to the teachers is very inadequate. Therefore, it may also be concluded that there is a need for greater in-service opportunities for the teachers.

With regard to preferences for in-service opportunities, both teacher and administrator respondents indicated that "professional books and journals", and "college or university courses during vacation" were the first and second, respectively, most preferred - Table 4.10. College or university courses during the school year, and special topic seminars were the third most preferred by teachers and administrators, respectively. All of these opportunities received "moderate" or "high" ratings from both respondent groups. The data in Table 4.10 also show that the two respondent groups assigned the three lowest ratings to the same in-service opportunities - evening classes, intership, and weekend classes.

In the above findings, the high preference given to in-service opportunities involving the use of professional books and journals, and courses during vacation or school periods is consistent with the findings of the studies of Cane (1969), Rosas (1980), and Pansegrau (1983) in which the respondents exhibited a strong desire for these kind of in-service opportunities. Further, the close similarity between teachers' and administrators' ratings of the in-service opportunities strongly suggest that the two groups had similar preferences regarding the kind of in-service opportunities that would be most beneficial to the teachers.

A comparison of teachers' and administrators' mean ratings of their preferences for the 11 in-service opportunities showed no significant differences between the two groups. However, significant differences were observed in the ratings of few in-service opportunities by teacher and administrator sub-groups. Of a possible 297 pairs of means compared among teacher sub-groups of highest degree held, level of teacher education, teaching experience, subject taught, and locale, only

5 pairs differed significantly (Tables 4.11 and 4.12). Of these 5 pairs, only 1 pair (Table 4.12, no. 1) involved one of the four most preferred opportunities. In this case the mean score (3.28) of rural teachers was significantly higher than that (2.83) of urban teachers in their preference for "college or university courses during the school year." The difference in preference may be due to the fact that most rural teachers also do small scale farming which keeps them busy during the vacation period.

With regard to administrator sub-groups of highest degree held, level of teacher education, administrative experience, and locale, 110 possible pairs of means were compared and significant differences occurred in only 7 pairs (Tables 4.13, 4.14, and 4.15). Of these 7 pairs, only 1 pair (Table 4.14, no. 6) involved one of the four most preferred opportunities. In this case the mean score (3.50) of administrators with bachelor of education was statistically higher than that (2.40) of administrators with Grade II in their preference for "one or two days workshop."

The absence of significant differences between teachers and administrators, and the fact that very few differences existed among their sub-groups in their preferences for the in-service opportunities is an important finding. For one, it indicates that there was a consensus among the respondents in their preferences for the in-service opportunities. In the light of this, it could be generalised that, over-all, teachers and administrators, regardless of degree held, level of teacher education, years of experience, major subject taught, and school location agreed in their preferences for the opportunities. The consensus among the respondents further suggests that the condition is very good for concerted institutional effort in dealing with in-service opportunity issues. Finally, it may be inferred that the 4 most preferred in-service opportunities mentioned above are the most appropriate for the teachers.

Summarizing, from the results and discussions presented in this section, it is evident that teachers and administrators did not differ significantly in their perceptions of "low" availability of in-service opportunities for teachers. Therefore, there seems to be a need for greater in-service opportunities for teachers. Further, no significant differences occured between teachers' and administrators' preferences for the in-service opportunities. The 4 most preferred opportunities by both groups were professional books and journals, college or university courses during vacation, or school year, and special topic seminars. Consequently, these in-service opportunities are deemed to be the most appropriate for the teachers.

Preferences on some Aspects of In-service Education

Summaries of the findings on the respondents' preferences for inservice financing, planning and organising, delivery methods, and incentives for teacher participation are presented in Tables 4.16 through 4.28. These findings are discussed under the relevant issues as follows:

Responsibility for Financing Locale In-service Programme

As exhibited in Table 4.16, teacher and administrator respondents ranked the 5 agencies that could be responsible for financing local in-service programme in an identical order. The Ministry of Education, Zonal Education Board, and Local Teachers' Union were ranked first, second, and third, respectively. Similarly, most of the interviewees felt that these 3 agencies, especially the Ministry of Education, should bear the cost of in-service education because of their good financial position. This result confirms Rosas' (1980) finding that teachers indicated that the Ministry of Education was the best group to sponsor in-service programmes.

From the above result, it seems reasonable to conclude that teachers and administrators agreed, rather than differed, in their preferences for the agencies that should finance in-service education. The lack of significant differences in the mean ratings assigned to the agencies by both groups lends some credence to this conclusion. Further, there is an apparent agreement among the respondents that in-service education should not be sponsored soley by the Ministry of Education.

Significant differences that existed in the mean ratings of teacher and administrator sub-groups' preferences of the 5 agencies were few. Of a possible 135 pairs of means compared among teacher sub-groups of highest degree held, level of teacher education, teaching experience, subject taught, and locale, only 2 pairs differed significantly (Table 4.17). However, the difference in both cases is less than 0.3 on the four-point rating scale. Similarly, of a possible 50 pairs of means compared among administrator sub-groups of highest degree held, level of teacher education, administrative experience, and locale, only 1 pair differed significantly (Table 4.18). In spite of these differences, it appears that there is a consensus among teachers, as well as administrators, on who should share the cost of in-service programmes.

In view of the foregoing, and in view of the fact that in-service programmes are currently funded by the Ministry of Education, it seems appropriate to propose that the Zonal Education Board and the Local Teachers' Union contribute to the funding of in-service programmes. This measure will widen the resource base of in-service education thereby generating more funds which could be used to support more in-service activities.

Responsibility for Planning and Organising Local In-service Programme

The data in Table 4.19 show that teachers and administrators ranked the 6 agencies that could be responsible for planning and organising local in-service programme in an identical order. The Ministry of Education was ranked first, Zonal Education Board was ranked second, and University and Teacher Training College was ranked third. A similar result was obtained from the interview, and the interviewees justified their responses by stating that the above agencies had the human and material resources necessary for planning, organising and deliverying an effective in-service programme. They also believed that more involvement of the Zonal Education Board and appropriate higher educational institutions will help to make in-service education more efficient and effective.

From the above findings, it is apparent that teachers and administrators had common preferences with regard to who should plan and organise in-service programmes. This ascertion gains support from the absence of significant differences either between teacher and administrator respondents or among their sub-groups. Further, it may be inferred that the respondents preferred that the 3 highest ranked agencies identified above be deeply involved in planning and organising in-service programmes.

At present, the Ministry of Education dominates the process of planning and organising in-service programmes. But in the light of the foregoing results, it is being proposed that the Zonal Education Board, Universities and Teacher Training Colleges be more deeply involved in planning and organising in-service programmes. This strategy will most likely enhance the in-service education programmes of teachers.

Timing of In-service Sessions

As evident in Table 4.20, the two most preferred times for in-service activities by teachers and administrators, in descending order, were vacation periods, and weekends. "School hours" was the third most preferred by teachers, while "evening hours" was the third most preferred by administrators. The interview yielded similar result, and the respondents explained that vacation period was the best time for in-service because it was the period when most teachers were under minimum pressure from other school activities. These results are in harmony with those reported by Cane (1969) and Staples (1970) in which teachers indicated that they would like the bulk of in-service training to take place during vacation periods, weekends or shool hours. No significant differences occurred either between teachers' and administrators' mean ratings or among the mean ratings of their sub-groups.

As may be inferred from the above results, teachers and administrators generally agreed that in-service activities should be conducted during vacations, weekends or school hours. The current practice in Aba school system is to conduct in-service activities during vacation or school hours. On the basis of the above findings, it is being proposed that the current practice continue.

In-service Delivery Methods

Table 4.21 shows that teachers and administrators ranked the four in-service delivery methods differently. The first and second most preferred methods by teachers were "formal lectures with opportunity for question", and "seminars with opportunity for questions and discussions", respectively. For the administrators, "seminars with opportunity for questions and discussions", and "workshops with practice in simulated or classroom setting", were the first and second most preferred, respectively. In the interview, most teachers stated that their high preference for formal lecture method was due to the fact that it was always easier to follow and more informative than the other methods. On the other hand, the administrators felt that seminars gave teachers more practical experience.

The above findings indicate that there are some differences between teachers' and administrators' preferences for in-service delivery methods. Table 4.22 shows that the differences are significant with respect to teachers' and administrators' ratings of formal lectures, and seminars. It may be concluded, therefore, that teachers and administrators differed in their preference on how in-service courses should be presented.

Not many significant differences existed among teacher and administrator sub-groups identified earlier in this section. Of a possible 108 pairs of means compared among teacher sub-groups, only 3 pairs differed significantly (Tables 4.23 and 4.24); but in no case was the difference upto 0.75 on the four-point rating scale. Likewise, of a possible 40 pairs of means compared among administrator sub-groups, only 1 pair differed significantly (Table 4.25). These findings strongly suggest that there was a concensus among the teachers, as well as among the administrators, in their preferences for in-service delivery methods.

The differences between teachers' and administrators' preferences for in-service delivery methods may reflect at least two possible conditions. First, it may be that the seminars and workshops were not effectively used - as the teachers claimed. If this is the case, then, in-service leaders should make greater effort to ensure that the seminars and workshops are better planned and executed. Second, it is plausible that the delivery methods used were not suitable for the courses presented. In this case, in-service leaders should ensure that in-service courses are presented through the appropriate method. As Harris (1980:73), and Joyce and Showers (1980:380) have stated, for maximun effectiveness, in-service activities must be presented with the appropriate training method. Effective use of the appropriate delivery method will help to ensure effective presentation of an in-service course.

Incentives for Teachers' Participation in In-service Activities

As shown in Table 4.26, teachers and administrators ranked the 5 incentives for teachers' participation in in-service activities in an identical order. The two most preferred incentives, in descending order, were "offering courses that lead to higher qualification or promotion", and "not requiring teachers to pay for in-service programmes." The high preference given to in-service courses that lead to higher qualification or promotion was justified by most of the interviewees on the ground that higher qualification or promotion results in higher salary as well as higher status. Also, they believed that such in-service courses will, by and large, have relevant application to the classroom. The high preference given to the incentive that has monetary and social rewards is consistent with the findings of the International Institute for Educational Planning (1970) that Palestine teachers were motivated and committed to in-service because of monetary payments and the awards of certificates.

From the above findings, it is evident that teachers and administrators did not differ in their preferences for in-service incentives for teachers. This ascertion is supported by the fact that no significant differences existed between the mean ratings assigned to the five incentives by both groups. In addition, it may be inferred that the respondents attached the highest importance to incentives that yield extrinsic as well as intrinsic rewards.

Few differences occurred among teacher and administrator sub-groups' preferences for the 5 incentives. Of a possible 135 pairs of means compared among the teachers, only 1 pair differed significantly (Table 4.27). Similarly, of a possible 50 pairs of means compared among the administrators, only 1 pair differed significantly (Table 4.28). From these findings, it may be concluded that, in general, teachers and administrators, regardless of the highest degree held, level of teacher education, years of experience, or locale agreed on their preferences for in-service incentives for teachers. The agreement among the respondents can be viewed as an evidence that the conditions are good for concerted institutional effort in dealing with in-service incentives issues.

SUMMARY

This chapter was devoted to the discussion of the findings of the study. What follows is a summary of the discussions and the conclusions that emerged from them.

With regard to the importance and difficulty of the 25 teaching tasks, it was found that teachers and administrators perceived most of the tasks to be "high" in importance. Both groups also felt that the teachers had "fairly moderate" or "moderate" difficulty in performing the same 6 tasks (Table 4.8a). It is concluded, therefore, that those 6 tasks are potential in-service need areas of the teachers.

Besides the 6 tasks indicated above, the administrators also perceived that the teachers experienced "faily moderate" or "moderate" difficulty in carrying out 11 other tasks (Table 4.8) in which the teachers felt that they encounted "low" difficulty. Information obtained from both teacher and administrator interviewees seemed to substantiate the view of the administrators regarding those 11 tasks. The inference drawn from this was that those 11 tasks are also potential teachers' in-service need areas. In the light of this, it was concluded that there are differences between teachers' and administrators' perceived in-service needs of teachers. Significant differences among teacher and administrator subgroups were very few. Thus it was concluded that there was a consensus among teachers, and among the administrators in their perceived in-service needs of teachers.

Concerning the availability of and preference for in-service opportunities, teachers and administrators strongly indicated that the 11 in-service opportunities which were identified were "low" in availabilty. About 3 in-service activities were available in a given year and less than 5 percent of the teachers had the opportunity to attend. The conclusion that emerged from these were that teachers and administrators did not differ in their perceptions of the availability of in-service opportunities; and that the number of in-service opportunities available to the teachers is very inadequate.

Teachers and administrators also exhibited similar preferences for the 11 in-service opportunities. The three most preferred opportunities for both groups were professional books and journals,college or university courses during vacation, and special topic seminars. There was a consensus among the respondents in their preferences for these opportunities. As a result, these opportunities were deemed to be the most appropriate for the teachers.

Teachers and administrators displayed very similar preferences with regard to in-service financing, planning and organising, timing, and incentives for teachers' participation. Both respondent groups preferred that the Ministry of Education be the chief sponsor of in-service programmes for teachers. They also believed that the Zonal Education Board, and the Locale Teachers' Union should contribute in financing in-service activities. In view of this, it was proposed that the two latter agencies assist the Ministry of Education in sponsoring in-service programmes.

There was a consensus among teachers and administrators that, in addition to the Ministry of Education, the Zonal Education Board, and the Universities and Teacher Training Colleges should be more involved in planning and organising in-service activities. This approach has the advantage of enhancing the in-service programme. Consequently, it is concluded that it is necessary to deeply involve the two latter institutions in planning and organising in-service activities.

Again, there were no differences between teachers' and administrators' preferences regarding when in-service sessions should be held. The two groups most preferred vaction periods, weekends, or school hours. Their preferences are consistent with the current practice. Thus, it was proposed that the current practice be encouraged.

There were significant differences between teachers' and administrators' preferences for in-service delivery methods. Teachers mostly preferred formal lecture format while administrators mostly preferred seminars.

Finally, teachers and administrators had a common belief on the incentives for teachers to participate in in-service activities. Offering in-service courses that lead to higher qualification or promotion, not requiring teachers to pay for in-service programmes, were the first and second most preferred, respectively. Overall, there was a consensus among the respondents on the best in-service incentives for teachers. The conclusion that emerged from this was that teachers and administrators did not differ in their preferences for in-service incentives for teachers. It was also inferred that most of the respondents preferred incentives that yielded extrinsic and intrinsic rewards.

CHAPTER 6

SUMMARY, CONCLUSION AND IMPLICATIONS

This study examined the differences between teachers' and administrators' perceptions of the nature and extent of the in-service needs of secondary school teachers in Aba school system, Imo State, Nigeria. Also, differences between teachers' and administrators' preferences regarding ways and means of meeting the in-service needs of teachers were examined.

This chapter summarizes the study, and then discusses the implications of the findings.

OVERVIEW OF THE STUDY

Conceptual Framework

The conceptual framework for this study (figure 1) was an adaptation of Sweitzer's (1976) model for in-service needs assessment. It conceives in-service need as being related to personal variables, and the amount of difficulty experienced by teachers in performing their tasks. This model was deemed appropriate for this study because it utilizes the two most common dimensions of need, namely, importance and difficulty. In addition, it was thought that its indirect approach would elicit more accurate response from the respondents.

Instrumentation and Data Collection

The data for this study were gathered through two similar questionnaires (one for teachers, the other for administrators) and an interview guide. The questionnaires were reviewed three times by selected faculty members of the Department of Educational Administration, University of Alberta. Each review was followed by a pre-test on groups of secondary school teachers and principals from Nigeria. The interview guide received a similar treatment.

The questionnaires were distributed in March, 1984 to 251 teachers and 18 principals in 18 schools which were identified through stratified random selection; and to 3 Zonal Education Office staff. The return of the questionnaires was about 80 percent from teachers, and 100 percent from administrators. The researcher interviewed 21 teachers and 7 administrators who were willing to be interviewed for the study.

Data Analyses

The data from the questionnaires were analysed by the use of means, percentages, and ranks. One-way analysis of variance and t-test were also used to determine any relationships between the independent variables and the overall findings. The

4 independent variables (also referred to as social categories or sub-groups) for both teachers and administrators were: (1) highest degree held, (2) level of teacher education, (3) experience, and (4) location. Two additional independent variables for teachers were: (1) school, and (2) subject taught.

Responses obtained from the interview were analysed according to their contents.

SUMMARY OF FINDINGS

The major findings of this investigation are summarized below in six sections that reflect the sub-problems that were addressed.

Teachers' Perceptions of the Importance and Difficulty of Teaching Tasks

1. Teachers regarded 19 of the 25 tasks to be "high" with regard to their importance.
2. No significant differences existed in teachers' perceptions of the importance of the tasks when grouped according to the 6 teacher social categories considered in this study.
3. Teachers perceived 6 tasks (Table 4.8a) to be either "moderate" or "fairly moderate" in difficulty, and 19 tasks to be "low" in difficulty.
4. Concerning the 6 tasks, teachers perceived 2 to be "high", 3 to be "moderate", and 1 to be "fairly moderate" in importance.

5. Two of the 6 tasks are curriculum and instruction related, 2 are pupil related, and 2 are change related.
6. There was only one major significant difference among teacher sub-groups' perceptions of the difficulty of the tasks: teachers with less than bachelor's degree perceived "moderate" difficulty in performing the task of "dealing with students who cause a lot of trouble in school" while those with bachelor's degree perceived "fairly moderate" difficulty in performing the same task.

Administrators' Perceptions of the Importance of the Teaching tasks and the Difficulty Experienced by their Teachers in Performing them

7. Administrators considered 23 of the 25 tasks to be "high" in importance.
8. There were no significant differences in administrators' perceptions of the importance of the tasks when grouped on the bases of the 4 administrator social categories considered in this study.
9. Administrators perceived 17 tasks (Tables 4.8 and 4.8a) to be either "moderate" or "fairly moderate' in difficulty for their teachers.
10. Concerning the 17 tasks, administrators perceived 15 to be "high", and 2 to be "moderate" in importance.
11. Eleven of the 17 tasks are curriculum and instruction related, 4 are pupil related, and 2 are change related.
12. Six of the 17 tasks were the same as those perceived

by teachers to be either "moderate" or "fairly moderate" in difficulty.

13. Significant differences existed among administrators with regard to their perceptions of the difficulty encountered by their teachers in performing 2 tasks (Table 4.6) when grouped according to the highest degree held, and 2 tasks (Table 4.7) when grouped on the basis of their experience.

Differences between Teachers' and Administrators' Perceptions of the Importance and Difficulty of Teaching Tasks

14. There were no significant differences between teachers' and administrators' perceptions of the importance of the 25 teaching tasks.
15. Significant differences were observed between teachers' and administrators' perceptions of the difficulty experienced by teachers in carrying out 12 tasks (Table 4.8).
16. In all the 12 tasks where signifcant differences were observed, teachers felt that they had "low" difficulty, whereas administrators felt that teachers had "moderate" or "fairly moderate" difficulty in performing the tasks.
17. In addition, 10 of the 12 rasks are curriculum/instruction related, and 2 are pupil related.
18. Most of the interview respondents indicated that in-service education was needed in order to arrest declining instructional standard.

Availability of In-service Opportunities for Helping Teachers to Overcome their Teaching Difficulties

19. Teachers and administrators perceived "low" availability of the 11 in-service opportunities identified.

20. Both groups ranked the availability of in-service opportunities in a similar order.

21. The 3 most available in-service opportunities were consultation with school system consultants, college or university courses during vacation, and professional books and journals.

22. No significant differences existed either between teachers and administrators or among their sub-groups regarding the availability of in-service opportunities.

Preference for In-service Opportunities

23. Teachers and administrators displayed similar preferences for the 11 in-service opportunities.

24. Both groups showed "fairly moderate" or "moderate" preferences for the same 8 in-service opportunities.

25. The 4 most preferred in-service opportunities, in descending order, were professional books and journals, college or university courses during vacation, college or university courses during the school year, and special topic seminars. The 3 least preferred opportunities, in descending order, were evening clases, internships, and weekend classes.

26. There were no significant differences between teachers' and administrators' preferences for the 11 in-service opportunities.

27. Significant differences observed among teacher sub-groups were few, and only in one case was one of the four most preferred opportunities involved. In that case (Table 4.12, no. 1), rural teachers displayed greater preference for college or university courses during the school year than did urban teachers.

28. Similarly, there were few significant differences among administrator sub-groups, and only in one case was one of the four most preferred opportunities involved. In that case (Table 4.13), administrators with diploma after bachelor, master's or doctorate degree showed greater preference for university courses during the school year than those with bachelor's degree or less.

Preferences on some Aspects of In-service Education

29. Teachers and administrators ranked the 5 agencies that could be responsible for financing in-service education in an identical order: the Ministry of Education, the Zonal Education Board, and the Local Teachers' Union were ranked first, second, and third, respectively. "Individual teachers" was ranked last.

30. There were no significant differences between teachers' and administrators' preferences for the 5 agencies, and

few existed among their sub-groups.

31. Teachers and administrators ranked the 6 agencies that could be responsible for planning and organising in-service programme in an identical order: the Ministry of Education, the Zonal Education Board, and Universities and Teacher Training Colleges were ranked first second, and third, respectively. "Teachers themselves" was ranked last.

32. No significant differences existed either between teachers and administrators or among their sub-groups with regard to their preferences for the 6 agencies.

33. Teachers and administrators ranked the 4 time periods in which in-service sessions could be held in a similar order. Vacation periods, and weekends were ranked first and second, respectively, by both groups.

34. There were no significant differences either between teachers and administrators or among their sub-groups with regard to their preferences for the 4 time periods.

35. Teachers and administrators differed significantly in their preferences for the 4 in-service delivery methods. Teachers assigned first and second ranks to formal lecturs, and seminars, respectively; while administrators assigned first and second ranks to seminars, and workshops, respectively.

36. Teachers and administrators ranked the 5 incentives for motivating teachers to participate in in-service activities

in an identical order: offering in-service courses that lead to higher qualification or promotion, not requiring teachers to pay for in-service programmes, and paying teachers extra salary for attending in-service activities that lasted longer than regular school hours were ranked first, second, and third, respectively.

37. There were no significant differences between teachers' and administrators' preference for the 5 incentives, and only 1 existed for each of the teacher and administrator sub-groups.

38. There were no differences between the questionnaire and interview data obtained from the administrators.

39. One major difference existed between the questionnaire and interview data obtained from the teachers - their indication of in-service needs was much stronger in the interview than in the questionnaire.

CONCLUSIONS

The findings that emerged from the 9 sub-problems addressed by this study constitute the major conclusions of the investigation. Based on those findings, and the discussions made on them in chapter 5, the following conclusions were reached:

Perceived In-service Needs of Teachers

1. Teachers and administrators agreed that teachers had "fairly moderate" or "moderate" difficulty in performing

6 tasks of which 2 are curriculum/instruction related, 2 are pupil related, and 2 are change related. This may be viewed as an indication of some of the task areas in which the teachers need in-service education.

2. Teachers and administrators differed significantly in their perceptions of the amount of difficulty experienced by teachers in performing 11 tasks of which 9 are curriculum/instruction related, and 2 are pupil related. In all the 11 tasks, teachers perceived "low" difficulty, whereas administrators perceived "moderate" or "fairly moderate" difficulty.
3. Most of the teacher and administrator interviewees indicated that there is an urgent need for in-service education so as to check declining standard of instruction. In view of this, it may be concluded that the 11 tasks indicated above in which the administrators felt that the teachers had "moderate" or fairly moderate" difficulty are among the in-service need areas of the teachers. Consequently, the differences between teachers' and administrators' perceptions of the amount of difficulty encountered by teachers in performing those tasks may be regarded as an evidence of differences between teachers' and administrators' perceived in-service needs of teachers.
4. Teachers and administrators agreed that the teachers had "low" difficulty in executing tasks which are staff, and management related.
5. When the teachers were grouped according to the social

categories of highest degree held, level of teacher education, experience, subject taught, school, and locale only one major significant difference occurred in their perceptions of the importance and difficulty of the teaching tasks. In the light of this, it seems appropriate to state that, overall, there was little relationship between these social categories and the teachers' perceptions of in-service needs.

6. Few significant differences were observed in administrators' perceptions of the amount of difficulty encountered by their teachers in performing their tasks when grouped on the bases of highest degree held, level of teacher education, experience, and locale. Therefore, it may be concluded that there was a high degree of consensus among the administrators with regard to their perceived in-service needs of the teachers.

Availability of and Preference for In-service Opportunities

7. Teachers and administrators assigned very low mean scores to the 11 in-service opportunities identified with regard to their availability. This led to the conclusion that both groups of respondents perceived "low" availability of the in-service opportunities.
8. Teachers and administrators did not differ significantly in their preferences for in-service opportunities for teachers.
9. The four most preferred in-service opportunities by teachers and administrators were "professional books and journal",

"college or university courses during the school year", and "special topic seminars", while "internships", and "weekend classes" were the least preferred.

10. Few significant differences existed among teacher and administrator sub-groups with regard to their preferences for the in-service opportunities. As a result, it is concluded that there was consensus among teachers and among administrators in their preferences for the opportunities.

Responsibility for Financing Local In-service Programme

11. Teachers and administrators ranked the 5 agencies that could be responsible for financing in-service programme in an identical order, and there were no significant differences between the two groups. This indicates that both groups of respondents agreed on the extent to which each of the agencies should bear the cost of in-service education.
12. Teachers and administrators agreed that the Ministry of Education, followed by the Zonal Education Board, and the Local Teachers' Union, should have the primary responsibility for financing in-service programme of teachers.
13. The occurrence of significant differences in only two instances among teacher sub-groups, and one instance among administrator sub-groups indicate that there was consensus among teachers and among administrators in their preferences for the agencies that should be responsible for financing in-service education programme for teachers.

Responsibility for Planning and Organising Local In-service Programme

14. Teachers and administrators ranked the 6 agencies that could be responsible for planning and organising in-service programme in an identical order, and there were no significant differences between the two groups. As such, it was concluded that both respondent groups agreed on the extent to which each of the agencies should be involved in planning and organising in-service programme for the teachers.

15. Teachers and administrators agreed that the Ministry of Education, followed by the Zonal Education Board, and Universities and Teacher Training Colleges, should be primarily responsible for planning and organising in-service programme of teachers.

16. The absence of significant differences among both teacher and administrator sub-groups strongly indicates that there was a high degree of consensus among the respondents with regard to their preferences for the agencies that should be responsible for planning and organising in-service education programme for teachers.

Timing of In-service Session

17. Teachers and administrators ranked the 4 different time periods in which in-service activities could be held in a similar order, and there were no significant differences between the two groups. This was regarded as an evidence of agreement between teachers and administrators in their

preferences for the timing of in-service session.

18. The two most preferred time periods for in-service activities by teachers and administrators were "vacation periods", and "weekends."

19. The absenme of significant differences among both teacher and administrator sub-groups strongly indicates that there was a high degree of consensus among the respondents with regard to their preferences for the 4 periods in which in-service activities could be held.

In-service Delivery Methods

20. Teachers and administrators differed in their preferences for in-service delivery methods. Formal lecture format was the method most preferred by teachers, while seminar format was the most preferred by administrators.

21. The existence of few significant differences among teacher and administrator sub-groups indicates that there was concensus among teachers, as well as among administrators, with respect to their preferences for the 4 in-service delivery methods.

Incentives for Teachers' Participation in In-service Activities

22. Teachers and administrators ranked the 5 incentives for motivating teachers to participate in in-service activities in an identical order, and there were no significant differences between the two groups. This led to the

conclusion that both groups of respondents did not differ in their preferences for the in-service incentives.

23. The in-service incentives of offering in-service courses that lead to higher qualification or promotion, and not requiring teachers to pay for in-service programmes were the two most preferred by teachers and administrators.

24. The occurrence of significant differences in only one instance among teacher sub-groups, and one instance among administrator sub-groups indicate that there was concensus among teachers, as well as among administrators, with regard to their preferences for the in-service incentives.

IMPLICATIONS OF THE STUDY

This section discusses the theoretical, research, and practical implications of the study.

Theoretical and Research Implications

Although teachers and administrators differed significantly in their perceived in-service needs of teachers, both groups generally agreed on the ways and means of meetings the needs. This implies that there may be particular aspects of in-service education in which teachers and administrators tend to agree, and other aspects in which they tend to disagreee on what is or what should be.

The findings from the questionnaire and interview data showed that the administrators were consistent in their perception that the teachers had great needs for in-service education. In contrast, the teachers' indication of in-service needs was much greater in the interview than in the questionnnaire. This apparent discrepancy in teachers' questionnaire and interview data raises some questions. One may ask if the teacher perceives greater in-service needs for other teachers than himself. If the teachers had been asked to indicate the in-service needs of other teachers would the results have been different from those of this study? These questions should be considered in designing a study similar to this one.

Students' perceptions of instructional effectiveness and suggestions for improvement were not included in this study. The inclusion of this group of respondents in future studies may help to determine, more effectively, the in-service needs of teachers.

The instruments used in this study were useful in assessing the in-service needs and preferences of teachers. For one, specific tasks areas in which the teachers might need in-service education were identified through the questionnaire. Secondly, the respondents' preferences on specific in-service issues and the reasons for those preferences were ascertained through the questionnaire and interview guide.

Finally, the design of the study to include administrators and teachers was useful in determining the in-service needs and preferences of teachers in that it created the opportunity for the comparison of the views of the providers and the receivers of in-service activities.

Practical Implications

One of the findings of this study was that teachers and administrators in Aba secondary school system indicated that teachers had considerable difficulty in performing 6 tasks, of which 2 were curriculum and instruction related, 2 were pupil related, and 2 were change related. The implication of this finding is that the teachers should be offered in-service activities designed to help them overcome the difficulties which they encounter in these task areas.

Another finding of this study was that the administrators felt that the teachers had considerable difficulty in performing 11 tasks (9 were curriculum and instruction related, and 2 were pupil related) in which the teachers indicated having little difficulty. In view of this, the administrators will have to confer with the teachers before offering in-service activities disigned to help them improve their performances in these task areas. Through such conferral teachers and administrators might come to agree on the kinds of in-service activities that should be offered to the teachers.

It was also found that in-service opportunities for the teachers were few. More in-service opportunities must be created if the teachers are to be helped in overcoming their professional needs. The four most preferred in-service opportunities by the respondents were those involving professional books and journals, college or university courses during vacation, or school year, and special topic seminars. Therefore,these opportunities should receive prime consideration when there is the contemplation on creating more in-service opportunities for the teachers.

When asked to indicate the agencies that should be responsible for financing in-service programmes the respondents displayed the strongest preference for the Ministry of Education, the Zonal Education Board, and the Local Teachers' Union. This implies that the two latter agencies might consider sharing the cost of in-service programmes with the Ministry of Education which currently finances it. Also, they might consider adding to the in-service opportunities.

When asked to indicate the agencies that should be responsible for planning and organising in-service programmes the respondents displayed the strongest preference for the Zonal Education Board, the Ministry of Education and Universities and Teacher Training Colleges. The implication of this is that the two latter agencies would have to be more involved in this aspect of in-service education which is currently dominated by the Zonal Education Board.

The two most preferred time period for in-service activities by the respondents were during vacation periods, and weekends. This suggests that the current practice of conducting in-service activities during vacation periods in the Aba school system should be encouraged, while weekends should be regarded as a possible alternative.

The in-service delivery methods that were most preferred by the respondents were formal lecture format, seminars, and workshops. Organisers of teachers' in-service activities in the Aba school system should, therefore, give prime consideration to these methods when contemplating on the mode for presenting in-service courses.

The in-service incentives of offering in-service courses that lead to higher qualification or promotion, and not requiring teachers to pay for in-service programmes were the two most preferred by the respondents. One implication of this finding is that the Aba school system would have to explore the ways of making these incentives possible. Offering credit courses during vacation periods might be one way of giving these incentives. Also, the school system, in collaboration with the State Ministry of Education, might consider giving financial assistance to teachers who, on their own initiative, undertake educational programmes designed for the professional development of teachers. Such incentives will benefit not only the teachers but also the students and, in effect, the school system and the society at large.

CONCLUDING COMMENTS

The issues of who should determine the in-service needs of teachers, and the ways and means of meeting those needs have drawn the attention of many educators for the past two decades, and may, possibly, continue to be on the spotlight for some years to come. The findings of this study, like those of some previous similar studies, indicate that significant differences exist between teachers' and administrators' perceptions of teachers' in-service needs. In the light of this, it seems that a collaborative approach, between teachers and administrators, is essential in determining the in-service education needs of teachers. Through this approach, the in-service needs of teachers could be more validly determined.

In this study, teachers and administrators generally agreed on the ways and means of meeting the in-service needs of teachers. The awareness of such an agreement is likely to create a better relationship between the two groups with regard to the planning and delivering of in-service activities.

On the whole, it appears that the in-service needs of teachers can be more effectively and validly assessed by involving both teachers and administrators. In addition, such involvement will most likely foster better relationship and understanding between the two groups, thereby enhancing the in-service process.

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APPENDICES

APPENDIX A

INSTRUMENTS

TEACHER IN-SERVICE NEEDS AND PREFERENCES
(TEACHER QUESTIONNAIRE)

This questionnaire is a survey of teachers' perceptions and preferences concerning in-service education needs and practices. It consists of 4 sections, namely:

Section 1 - which requests some personal data;

Section 2 - which is concerned with the IMPORTANCE and DIFFICULTY of some teaching TASKS;

Section 3 - which deals with the identification of in-service OPPORTUNITIES and PREFERENCES;

Section 4 - which focuses on teachers' PREFERENCES on some in-service education practices.

Definition

For the purpose of this study, in-service education refers to any organised learning activity for practising teachers specifically designed to help them maintain or improve their professional competence.

General Instruction

1. Please answer the questions in all the sections.
2. On completion put the questionnaire in the envelope provided and seal it. The researcher will collect it from you.

Please be frank in your responses with the assurance that individual responses are strictly CONFIDENTIAL.

To insure your anonimity and privacy it is NOT necessary to write your name on this questionnaire.

(over)

SECTION 1: PERSONAL DATA

for office use

cc

1

1 - 4

Direction

Please place a check mark (✓) or the appropriate response in the spaces provided in the following questions as they apply to you (check ONLY ONE in EACH case):

1. Level of Education or Highest Degree Held: 5
   1. Less than bachelor's degree ( )
   2. Bachelor's degree ( )
   3. Diploma after bachelor's degree ( )
   4. Master's degree ( )
   5. Doctorate degree ( )

2. Highest Level of Teacher Education Received: 6
   1. None ( )
   2. Grade II Teachers' Training ( )
   3. Advanced Teachers' Training ( )
   4. Bachelor of Education ( )
   5. Other (please specify) ______________________

3. Years of Teaching Experience: 7
   1. 1-5 ( ) 2. 6-10 ( ) 3. 11-15 ( )
   4. 16-20 ( ) 5. Over 20 ( )

4. Major Subject Taught: 8
   1. Language Arts ( ) 2. Math. ( ) 3. Science ( )
   4. Social Studies ( ) 5. Other (specify) ______________________

5. School Location: 1. Urban ( ) 2. Rural ( ) 9

(over)

SECTION 2: IMPORTANCE AND DIFFICULTY OFTEACHING TASKS

Directions

Below is a list of tasks or responsibilities often included in the role of the teacher. Please:

1. Circle the number that best describes how IMPORTANT you feel each task is to YOU;
2. Circle the number that best describes the amount of DIFFICULTY you experience in performing each task.

	TEACHING TASK OR RESPONSIBILITY	IMPORTANCE				DIFFICULTY				
		Not Important	Slightly Important	Moderately Important	Very Important	No Difficulty	Slight Difficulty	Moderate Difficulty	Great Difficulty	cc
1.	Developing and maintaining knowledge in the subject area in which you teach	1	2	3	4	1	2	3	4	10,11
2.	Interpreting the syllabus (curriculum) for your subject area	1	2	3	4	1	2	3	4	12,13
3.	Planning and preparing lessons	1	2	3	4	1	2	3	4	14,15
4.	Evaluating and selecting teaching materials	1	2	3	4	1	2	3	4	16,17
5.	Using various teaching techniques for instruction	1	2	3	4	1	2	3	4	18,19
6.	Teaching classes of varied abilities	1	2	3	4	1	2	3	4	20,21
7.	Applying recent educational findings in the classroom	1	2	3	4	1	2	3	4	22,23

(over)

TEACHING TASK OR RESPONSIBILITY	IMPORTANCE				DIFFICULTY				
	Not Important	Slightly Important	Moderately Important	Very Important	No Difficulty	Slight Difficulty	Moderate Difficulty	Great Difficulty	cc
8. Using teaching aids	1	2	3	4	1	2	3	4	24,25
9. Constructing, marking, and interpreting student examinations	1	2	3	4	1	2	3	4	26,27
10. Using instructional time effectively	1	2	3	4	1	2	3	4	28,29
11. Evaluating self performance	1	2	3	4	1	2	3	4	30,31
12. Using available professional literature to help improve your knowledge and competence	1	2	3	4	1	2	3	4	32,33
13. Communicating effectively with students	1	2	3	4	1	2	3	4	34,35
14. Understanding students' learning problems	1	2	3	4	1	2	3	4	36,37
15. Motivating students	1	2	3	4	1	2	3	4	38,39
16. Guiding and counselling students	1	2	3	4	1	2	3	4	40,41
17. Dealing with students who cause a lot of trouble in school	1	2	3	4	1	2	3	4	42,43
18. Maintaining good relationship with students	1	2	3	4	1	2	3	4	44,45
19. Attending staff meetings	1	2	3	4	1	2	3	4	46,47
20. Communicating effectively with staff members	1	2	3	4	1	2	3	4	48,49

(over)

	IMPORTANCE				DIFFICULTY				
TEACHING TASK OR RESPONSIBILITY	Not Important	Slightly Important	Moderately Important	Very Important	No Difficulty	Slight Difficulty	Moderate Difficulty	Great Difficulty	cc
21. Working cooperatively with staff members	1	2	3	4	1	2	3	4	50,51
22. Communicating effectively with school administrators (e.g. principal and supervisors)	1	2	3	4	1	2	3	4	52,53
23. Cooperating with school administrators (e.g. principal and supervisors)	1	2	3	4	1	2	3	4	54,55
24. Implementing a new programme in the school	1	2	3	4	1	2	3	4	56,57
25. Adjusting to changes in the school or school system	1	2	3	4	1	2	3	4	58,59
26. Other (specify) --------- ------------------------	1	2	3	4	1	2	3	4	60,61
27. Other (specify) -------- ------------------------	1	2	3	4	1	2	3	4	62,63

(over)

SECTION 3: IN-SERVICE OPPORTUNITIES AND PREFERENCES

Directions

Following is a list of in-service opportunities or activities for helping teachers overcome their teaching difficulties. Please:

1. Circle the number that best reflects the degree of AVAILABILITY (that is, presence and accessibility) of each OPPORTUNITY to you from January, 1982 to December, 1983.

2. Circle the number that best reflects the degree of your PREFERENCE for each OPPORTUNITY.

	AVAILABILITY				PREFERENCE				for office use
IN-SERVICE OPPORTUNITY	Not Available	Slightly Available	Moderately Available	Readily Available	Not Preferred	Slightly Preferred	Moderately Preferred	Strongly Preferred	cc
1. College or university courses during the school yesr	1	2	3	4	1	2	3	4	5
2. College or university courses during vacation	1	2	3	4	1	2	3	4	6
3. Evening classes	1	2	3	4	1	2	3	4	7
4. Weekend classes	1	2	3	4	1	2	3	4	8
5. Intensive short courses (1 or 2 weeks duration)	1	2	3	4	1	2	3	4	9
6. One or two days workshop	1	2	3	4	1	2	3	4	10
7. Yearly conferences and conventions	1	2	3	4	1	2	3	4	11
8. Special topic seminars	1	2	3	4	1	2	3	4	12
9. Internships	1	2	3	4	1	2	3	4	13

(over)

	AVAILABILITY				PREFERENCE				
IN-SERVICE OPPORTUNITY	Not Available	Slightly Available	Moderately Available	Readly Available	Not Preferred	Slightly Preferred	Moderately Preferred	Strongly Preferred	cc
10. Professional books and journals	1	2	3	4	1	2	3	4	14
11. Consultation with school system consultants (e.g. department heads and supervising principals	1	2	3	4	1	2	3	4	15
12. Other (specify) ______ ____________________	1	2	3	4	1	2	3	4	16
13. Other (specify) ______ ____________________	1	2	3	4	1	2	3	4	17

(over)

SECTION 4: PREFERENCES ON SOME ASPECTS OF IN-SERVICE EDUCATION

cc

Direction

Please RANK in the order of your PREFERENCE or PRIORTY the ITEMS in each of the following questions using 1 (one) as the highest rank:

1. Financing local in-service programme should be the responsibility of:

(a) _____ Local Teachers' Union 18

(b) _____ Zonal Education Board 19

(c) _____ Ministry of Education 20

(d) _____ Individual teachers 21

(e) _____ Individual schools 22

(f) _____ Other (specify) ________________________ 23

2. Planning and organising local in-service programmes should be the responsibility of:

(a) _____ Local Teachers' Union 24

(b) _____ Zonal Education Board 25

(c) _____ Ministry of Education 26

(d) _____ Universities and Teacher Training Colleges 27

(e) _____ Teachers themselves 28

(f) _____ Individual schools 29

(g) _____ Other (specify) ________________________ 30

3. In-service sessions should be held during:

(a) _____ School hours 31

(b) _____ Evening hours 32

(c) _____ Weekends 33

(d) _____ Vacation periods 34

(e) _____ Other (specify) ________________________ 35 cc

4. In-service courses should be taught through:

(a) _____ Formal lectures with opportunity for questions 36

(b) _____ Seminars with opportunity for questions and discussions 37

(c) _____ Workshops with practice in simulated or classroom setting 38

(d) _____ Special radio or television programme for teachers 39

(e) _____ Other (specify) ____________________ 40

5. Teachers should be motivated to participate in in-service activities by:

(a) _____ Involving more teachers in planning in-service activities 41

(b) _____ Offering in-service courses that lead to higher qualification or promotion 42

(c) _____ Paying teachers extra salary for attending in-service activities that last longer than regular school hours 43

(d) _____ Not requiring teachers to pay for in-service programmes 44

(e) _____ Offering in-service activities that have direct application to the classroom 45

(f) _____ Other (specify) ____________________ 46

____

Please add comments, if you wish, on the back of this questionnaire.

THANK YOU FOR YOUR TIME AND COOPERATION.

TEACHER IN-SERVICE NEEDS AND PREFERENCES
(ADMINISTRATOR QUESTIONNAIRE)

This questionnaire is a survey of administrators' perceptions and preferences concerning teachers' in-service education needs and practices. It consists of 4 sections, namely:

Section 1 - which requests some personal data;

Section 2 - which is concerned with the IMPORTANCE and DIFFICULTY of some teaching TASKS;

Section 3 - which deals with the identification of in-service OPPORTUNITIES and PREFERENCES;

Section 4 - which focuses on teachers' PREFERENCES on some in-service education practices.

Definition

For the purpose of this study, in-service education refers to any organised learning activity for practising teachers specifically designed to help them maintain or improve their professional competence.

General Instruction

1. Please answer the questions in all the sections.
2. On completion put the questionnaire in the envelope provided and seal it. The researcher will collect it from you.

Please be frank in your responses with the assurance that individual responses are strictly CONFIDENTIAL.

To insure your anonimity and privacy it is NOT necessary to write your name on this questionnaire.

(over)

SECTION 1: PERSONAL DATA

for office use
cc
1

Directions

Please place a check mark (✓) or the appropriate response in the spaces provided in the following questions as they apply to you.

1. Level of education or highest degree held 1 - 4
   1. Less than bachelor's degree ( )
   2. Bachelor's degree ( )
   3. Diploma after bachelor's degree ( ) 5
   4. Master's degree ( )
   5. Doctorate degree ( )

2. Highest level of Teacher Education received
   1. None ( )
   2. Grade II Teachers' Training ( )
   3. Advanced Teachers' Training ( ) 6
   4. Bachelor of Education ( )
   5. Other (please specify) ______________

3. Present Position
   1. School Principal ( )
   2. Zonal Education Board Personnel ( ) ______________ (please specify) 7
   3. Teachers' Union Personnel ( ) ______________ (please specify)

4. Years of administrative experience 8

5. School location 1. Urban ( ) 2. Rural ( ) 9

(over)

SECTION 2: IMPORTANCE AND DIFFICULTY OF TEACHING TASKS

Directions

Below is a list of tasks or responsibilities often included in the role of the teacher. Please:

1. Circle the number that best describes how IMPORTANT you feel each task is for YOUR teachers;
2. Circle the number that best describes the amount of DIFFICULTY which you feel your teachers experience in performing each task.

		IMPORTANCE				DIFFICULTY				
	TEACHING TASK OR RESPONSIBILITY	Not Important	Slightly Important	Moderately Important	Very Important	No Difficulty	Slight Difficulty	Moderate Difficulty	Great Difficulty	cc
1.	Developing and maintaining knowledge in the subject area in which they teach	1	2	3	4	1	2	3	4	10,11
2.	Interpreting the syllabus (curriculum) for their subject area	1	2	3	4	1	2	3	4	12,13
3.	Planning and preparing lessons	1	2	3	4	1	2	3	4	14,15
4.	Evaluating and selecting teaching materials	1	2	3	4	1	2	3	4	16,17
5.	Using various teaching techniques for instruction	1	2	3	4	1	2	3	4	18,19
6.	Teaching classes of varied abilities	1	2	3	4	1	2	3	4	20,21
7.	Applying recent educational findings in the classroom	1	2	3	4	1	2	3	4	22,23

(over)

TEACHING TASK OR RESPONSIBILITY	IMPORTANCE Not Important	 Slightly Important	 Moderately Important	 Very Important	DIFFICULTY No Difficulty	 Slight Difficulty	 Moderate Difficulty	 Great Difficulty	cc
8. Using teaching aids	1	2	3	4	1	2	3	4	24,25
9. Constructing, marking, and interpreting student examinations	1	2	3	4	1	2	3	4	26,27
10. Using instructional time effectively	1	2	3	4	1	2	3	4	28,29
11. Evaluating self performance	1	2	3	4	1	2	3	4	30,31
12. Using available professional literature to help improve your knowledge and competence	1	2	3	4	1	2	3	4	32,33
13. Communicating effectively with students	1	2	3	4	1	2	3	4	34,35
14. Understanding students' learning problems	1	2	3	4	1	2	3	4	36,37
15. Motivating students	1	2	3	4	1	2	3	4	38,39
16. Guiding and counselling students	1	2	3	4	1	2	3	4	40,41
17. Dealing with students who cause a lot of trouble in school	1	2	3	4	1	2	3	4	42,43
18. Maintaining good relationship with students	1	2	3	4	1	2	3	4	44,45
19. Attending staff meetings	1	2	3	4	1	2	3	4	46,47
20. Communicating effectively with staff members	1	2	3	4	1	2	3	4	48,49

(over)

TEACHING TASK OR RESPONSIBILITY	IMPORTANCE				DIFFICULTY				cc
	Not Important	Slightly Important	Moderately Important	Very Important	No Difficulty	Slight Difficulty	Moderate Difficulty	Great Difficulty	
21. Working cooperatively with staff members	1	2	3	4	1	2	3	4	50,51
22. Communicating effectively with school administrators (e.g. principal and supervisors)	1	2	3	4	1	2	3	4	52,53
23. Cooperating with school administrators (e.g. principal and supervisors)	1	2	3	4	1	2	3	4	54,55
24. Implementing a new programme in the school	1	2	3	4	1	2	3	4	56,57
25. Adjusting to changes in the school or school system	1	2	3	4	1	2	3	4	58,59
26. Other (specify) --------- -------------------------	1	2	3	4	1	2	3	4	60,61
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(over)

SECTION 3: IN-SERVICE OPPORTUNITIES AND PREFERENCES

Directions

Following is a list of in-service opportunities or activities for helping teachers overcome their teaching difficulties. Please:

1. Circle the number that reflects the degree of AVAILABILITY (that is, presence and accessibility) of each OPPORTUNITY to your teachers from January, 1982 to December, 1983.
2. Circle the number that best reflects the degree of your PREFERENCE for each OPPORTUNITY for your teachers.

	AVAILABILITY				PREFERENCE				for office use cc 2 1 - 4
IN-SERVICE OPPORTUNITY	Not Available	Slightly Available	Moderately Available	Readily Available	Not Preferred	Slightly Preferred	Moderately Preferred	Strongly Preferred	
1. College or university courses during the school year	1	2	3	4	1	2	3	4	5
2. College or university courses during vacation	1	2	3	4	1	2	3	4	6
3. Evening classes	1	2	3	4	1	2	3	4	7
4. Weekend classes	1	2	3	4	1	2	3	4	8
5. Intensive short courses (1 or 2 weeks duration)	1	2	3	4	1	2	3	4	9
6. One or two days workshop	1	2	3	4	1	2	3	4	10
7. Yearly conferences and conventions	1	2	3	4	1	2	3	4	11
8. Special topic seminars	1	2	3	4	1	2	3	4	12
9. Internships	1	2	3	4	1	2	3	4	13

(over)

	AVAILABILITY				PREFERENCE				
IN-SERVICE OPPORTUNITY	Not Available	Slightly Available	Moderately Available	Readily Available	Not Preferred	Slightly Preferred	Moderately Preferred	Strongly Preferred	cc
10. Professional books and journals	1	2	3	4	1	2	3	4	14
11. Consultation with school system consultants (e.g. department heads and supervising principals	1	2	3	4	1	2	3	4	15
12. Other (specify) ______ ____________________	1	2	3	4	1	2	3	4	16
13. Other (specify) ______ ____________________	1	2	3	4	1	2	3	4	17

(over)

SECTION 4: PREFERENCES ON SOME ASPECTS OF IN-SERVICE EDUCATION

cc

Direction

Please RANK in the order of your PREFERENCE or PRIORTY the ITEMS in each of the following questions using 1 (one) as the highest rank:

1. Financing local in-service programme should be the responsibility of:

(a) _____ Local Teachers' Union 18

(b) _____ Zonal Education Board 19

(c) _____ Ministry of Education 20

(d) _____ Individual teachers 21

(e) _____ Individual schools 22

(f) _____ Other (specify) ______________________________ 23

2. Planning and organising local in-service programmes should be the responsibility of:

(a) _____ Local Teachers' Union 24

(b) _____ Zonal Education Board 25

(c) _____ Ministry of Education 26

(d) _____ Universities and Teacher Training Colleges 27

(e) _____ Teachers themselves 28

(f) _____ Individual schools 29

(g) _____ Other (specify) ______________________________ 30

3. In-service sessions should be held during:

(a) _____ School hours 31

(b) _____ Evening hours 32

(c) _____ Weekends 33

(d) _____ Vacation periods 34

(e) _____ Other (specify) ______________________________ 35 cc

4. In-service courses should be taught through:

(a) _____ Formal lectures with opportunity for questions 36

(b) _____ Seminars with opportunity for questions and discussions 37

(c) _____ Workshops with practice in simulated or classroom setting 38

(d) _____ Special radio or television programme for teachers 39

(e) _____ Other (specify) ____________________ 40

5. Teachers should be motivated to participate in in-service activities by:

(a) _____ Involving more teachers in planning in-service activities 41

(b) _____ Offering in-service courses that lead to higher qualification or promotion 42

(c) _____ Paying teachers extra salary for attending in-service activities that last longer than regular school hours 43

(d) _____ Not requiring teachers to pay for in-service programmes 44

(e) _____ Offering in-service activities that have direct application to the classroom 45

(f) _____ Other (specify) ____________________ 46

____

Please add comments, if you wish, on the back of this questionnaire.

THANK YOU FOR YOUR TIME AND COOPERATION.

TEACHER IN-SERVICE NEEDS AND PREFERENCES

TEACHER AND ADMINISTRATOR INTERVIEW GUIDE
(To be said to the interviewee)

This interview is a follow-up to the questionnaire on teachers' in-service needs and preferences which you completed recently. May I assure you that your responses will remain anonymous and confidential.

The questions are grouped under two sections. The first section seeks contextual information, while the second section asks for elaboration on your responses to section 4 of the questionnaire.

SECTION 1: CONTEXTUAL INFORMATION

1. What kind of educational preparation do teachers and administrators in Aba school system have? ______________

____

____

____

2. Generally speaking, what are the current in-service teacher education practices of Aba school system? _____

____

____

____

____

____

3. In brief, how will you describe the social condition of Aba school system community with regard to teacher training institutions, transportation, communication and teachers' socio-economic status? ________________________

____

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SECTION 2: ELABORATION ON RESPONSES TO SECTION 4 OF THE QUESTIONNAIRE

Please elaborate briefly on your responses to each of the 5 issues on Section 4 of the questionnaire (indicate each issue and the responses):

1. Responsibility for financing local in-service programme

2. Responsibility for planning and organising local in-service programme:

3. Timing of in-service sessions:

4. In-service delivery methods:

____

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5. Incentives for teachers' participation in in-service activities:

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6. Do you have any other comments or questions on the in-service needs of teachers and the ways and means of meeting the needs?

____

____

____

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____

____

THANK YOU FOR YOUR TIME AND COOPERATION

APPENDIX B

CORRESPONDENCE

University of Alberta
Edmonton

Department of Educational Administration
Faculty of Education

Canada T6G 2G5

7-104 Education Building North, Telephone (403) 432-5241

June 28, 1983

The Chairman
Zonal Education Board
Aba

Sir

I am a doctoral student in the Department of Educational Administration at the University of Alberta and my dissertation research is in the field of in-service needs and preferences of secondary school teachers. To conduct this study, I need the assistance of the following persons in your school system in filling the questionnaires:

About 120 teachers and 12 principals selected from 12 secondary schools

Zonal office personnel involved in providing in-service activities for secondary school teachers.

I am, therefore, seeking your permission to distribute these questionnaires in your school system any time between November 1983 and February 1984.

Thank you for your cooperation.

Yours truly

Chiemela Nwa. Ikonne

IMO STATE GOVERNMENT

Telegrams:

Telephone:

Your Ref...................

Our Ref...IM/ZEB/A.69/204

(All replies to be addressed to the Chairman)

Zonal Education Board,
P.M.B. 7208, Aba.

29th September, 19 83

Mr. Chiemela Nwa Ikonne,
Department of Educational Administration,
Faculty of Education,
University of Alberta,
7-104 Education North,
Edemonton,
ALBERTA,
Canada.

PERMISSION TO DISTRIBUTE RESEARCH MATERIALS

I wish to refer to your letter of 28th June, 1983 in which you requested the permission to distribute Research Questionaires among about 120 teachers and 12 Principals selected from 12 secondary schools within Aba Zone sometime between November, 1983 and February, 1984. You also indicated that the research programme involves in-service activities for secondary school teachers.

2. The permission for which you requested is hereby given as it is one of the responsibilities of the Board to enhance education within its territory.

J. W. Wogu,
CHAIRMAN,
ZONAL EDUCATION BOARD.

DEPARTMENT OF
EDUCATIONAL ADMINISTRATION
FACULTY OF EDUCATION
THE UNIVERSITY OF ALBERTA

26th January, 1984

The Chairman,
Zonal Education Board,
Aba.

Sir,

This is to acknowledge the receipt of your letter permitting me to distribute research materials in selected secondary schools within Aba Zone. I wish to inform you that I will be distributing the said materials during the months of February and March, 1984.

Further, principals and teachers from the following schools will be involved in the study:

1. Wilcox Memorial Sec. Sch.
2. Girls High School, Aba
3. Nvosi High Sch., U'kpeyi
4. Nneise Sec. School
5. Ovuokwu/Omoba Sec. Sch.
6. Okporo Ahaba Sec. Sch.
7. Community Sec. Sch, Nbawsi
8. Amapu Ntigha Sec. Sch.
9. Girls Sec. Sch. Itungwa-NItukpa
10. Ndiakata Sec. School
11. Ovom Girls High School
12. Nenu Sec. School
13. Onicha Ngwa Sec. School
14. Alaukwu Sec. School
15. Ngwa High Sch., Abayi
16. Akanu Ngwa Sec. Sch.
17. National Sec. Sch, Azumini
18. Girls Sec. Sch, Ikwueke
19. Asa High School
20. Obokwe Sec. School

I am requesting that the educators in the above schools be notified of my intention to visit their schools and to have them complete questionnaires for the research.

Thank you for your cooperation.

Sincerely yours,

Chiemela Nwa. Ikonne
(Ph.D. Student)

7-104. EDUCATION NORTH. EDMONTON. ALBERTA. CANADA T6G 2G5 TELEPHONE (403) 432-5241

IMO STATE GOVERNMENT

ZONAL EDUCATION BOARD
~~[illegible]~~

~~[illegible]~~ 7208, ABA.

Telegrams:

Telephone:

Your Ref.............................

Our Ref.............................

(All replies to be addressed to the Chairman)

5th March 19 84

The Principal,

1. Wilcox Memorial Comprehensive Sec. Sch.
2. Girls High School, Aba
3. Nvosi High School, Umukpeyi
4. Nneise Secondary School
5. Ovuokwu/Umoba Secondary School
6. Okporo Ahaba Sec. School
7. Community Secondary School, Nbawsi.
8. Amapu Ntigha Secondary School
9. Girls Sec. School Itungwa/Itukpa
10. Ndiakata Sec. School.
11. Ovom Girls High School
12. Nenu Secondary School
13. Onicha Ngwa Sec. School
14. Alaukwu Sec. School
15. Ngwa High School, Abayi
16. Akanu Ngwa Secondary School
17. National Secondary School, Azumini
18. Girls Secondary School Ikwueke
19. Obokwe Secondary School
20. Asa High School.

Mr. Chiemela N. Ikonne - Permission to Distribute Research Materials

Clearance is given to the above named research student to visit your school to obtain necessary data required for his research project.

Please co-operate with him.

(E.F. Uko)
Chief Education Officer (SM)
Zonal Education Board,
Aba.

NATIONAL UNIVERSITIES COMMISSION
THOUGHT AND SERVICE

NIGERIAN UNIVERSITIES OFFICE
150 KENT ST., SUITE 702
OTTAWA, ONTARIO K1P 5P4
CANADA

TELEPHONE: (613) 238-3533; 238-3534
CABLE: 'NIGUNOFF', OTTAWA
TELEX: 053-3513

YOUR REF:
OUR REF:

19 July, 1983

TO WHOM IT MAY CONCERN:

This is to certify that a study on teacher inservice needs in Nigeria is relevant to the current educational needs of Nigeria. The entire educational system of the country during the last decade, from the primary to the University levels, has undergone and is still undergoing tremendous expansion. As a result, many questions have been raised that require fundamental examination in order to co-ordinate the various activities in the field and produce a well streamlined system. Any funds or efforts expended on research work in this direction represents a judicious investment in the future of the peoples of these developing countries. It is with this in mind that I hope that you would be able to support both financially and morally the endeavours of Mr. C.N. Ikonne in this direction.

Yours truly,

EJAkpan

E.J. Akpan
Acting Director

EJA/pj